

EXHIBIT 14

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407


| US 8,510,407's Claim Limitation | Accused Instrumentality |
|---|--|
| <p>1. A client computing device configured to access content over a network, the client computing device comprising:</p> | <p>DoDots currently does not take a position as to whether the preamble of claim 1 is limiting. Notwithstanding this position, Best Buy sells, offers for sale, and markets a client computing device configured to access content over a network.</p> <p>Specifically, the client computing devices include, but are not limited to the Samsung Galaxy Z Series Mobile Phones, Galaxy S Series Mobile Phones, Galaxy Note Series Mobile Phones, Galaxy A Series Mobile Phones, Galaxy M Series Mobile phones, and Galaxy Tab Series Tablets (collectively, "Accused Samsung Devices"). DoDots reserves the right to identify additional client computing devices to the extent additional devices are revealed during discovery.</p> <p>Examples of the Galaxy S Series Mobile Phones are seen in the image below:</p>  <p>Source: Dolcourt, et. al., <i>Here's every Galaxy S phone since 2010</i>, CNET Website (February 8, 2019) (accessed at https://www.cnet.com/pictures/evolution-history-samsung-galaxy-phones/)</p> <p>Additionally, with each Accused Samsung Devices, Samsung launched and continues to operate, use, and sell an operating system customized from the Android OS (e.g. Android OS12, OS 11, QOS 10, Pie (9.0),Oreo (8.0), Nougat (7.0), Marshmallow (6.0), Lollipop (5.0), KitKat (4.4), Jellybean (4.3, 4.2 and 4.1),</p> |

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| | <p>Ice Cream Sandwich (4.0), Honeycomb (3.0), Gingerbread (2.3), Froyo (2.2), Éclair (2.1), Donut (1.6) (collectively, "the Samsung OS") along with other software (e.g., installers, the Play Store app, and the Galaxy App Store app) that are pre-installed or updated on each Accused Samsung Device (the "Accused Samsung Software"). Samsung programmed, customized, preinstalled, and developed the Accused Samsung Software specifically for its Accused Samsung Devices and is directly responsible for and has direct control over the use of the Samsung OS along with other software</p> <p>In summary, the Accused Samsung Devices and Samsung OS along with other software (collectively, the "Accused Instrumentalities") constitute the client computing device configured to access content over a network.</p> <p>The Accused Instrumentalities, which are client computing devices, are configured to access content over a network as evidenced by the Samsung's specifications for the Samsung Galaxy S8, which promote the devices' connectivity abilities as shown below:</p> |

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| | Network | | |
| | Frequencies and Data Type ? B1(2100), B2(1900), B3(1800), B4(AWS), B5(850), B7(2600), B8(900), B12(700), B13(700), B17(700), B18(800), B19(800), B20(800), B25(1900), B26(800), B28(700), B29(700), B30(2300), B66(AWS-3) | | |
| | Connectivity | | |
| | Wi-Fi Connectivity 802.11 a/b/g/n/ac 2.4G+5GHz, VHT80 MU-MIMO,1024-QAM | USB ? USB Type-C USB 3.1 Gen 1 | Bluetooth® Bluetooth v5.0 (LE up to 2 Mbps) |
| | ANT+ Yes | Bluetooth® Profiles A2DP,AVRCP,DI,HFP,HID,HOGP,HS P,MAP,OPP,PAN,PBAP | Location Technology GPS,Glonass |
| EarJack 3.5mm Stereo | Wi-Fi Direct Yes | NFC Yes | |
| Source: https://www.samsung.com/us/mobile/phones/galaxy-s/galaxy-s8-64gb--unlocked--sm-g950uzkaxaa/ . Like the Samsung Galaxy S8, each of the other Accused Samsung Devices is also configured to access content over a network . | | | |

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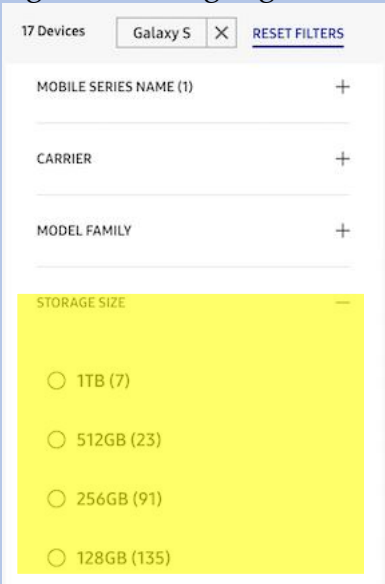
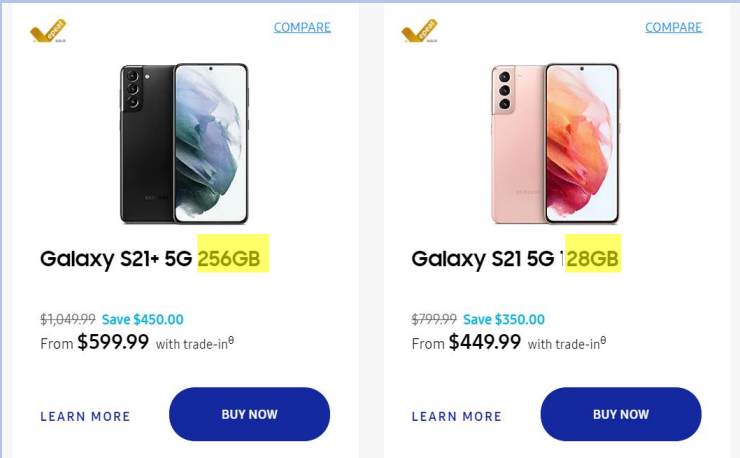


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| <p>electronic storage configured to store networked information monitor template associated with a networked information monitor, the networked information monitor template having therein a definition of a viewer graphical user interface having a frame within which time-varying content in a web browser-readable language may be presented on a display associated with</p> | <p>The Accused Instrumentalities have electronic storage configured to store networked information monitor template associated with a networked information monitor, the networked information monitor template having therein a definition of a viewer graphical user interface having a frame within which time-varying content in a web browser-readable language (XML) may be presented on a display associated with the client computing device, wherein the frame of the viewer graphical user interface lacks controls enabling a user to specify a network location (is not a browser, the app specifies web network location) at which content for the networked information monitor is available.</p> <p>Specifically, the electronic storage of the Accused Samsung Devices includes the flash memory, which can be seen on Samsung's website, which promotes the storage size of the Accused Samsung Devices, e.g., 128GB, highlight below:</p> <div data-bbox="489 802 871 1382">  <p>17 Devices Galaxy S X RESET FILTERS</p> <p>MOBILE SERIES NAME (1) +</p> <p>CARRIER +</p> <p>MODEL FAMILY +</p> <p>STORAGE SIZE</p> <ul style="list-style-type: none"> <input type="radio"/> 1TB (7) <input type="radio"/> 512GB (23) <input type="radio"/> 256GB (91) <input type="radio"/> 128GB (135) </div> <div data-bbox="934 927 1669 1382">  <div>  <p>Galaxy S21+ 5G 256GB</p> <p>\$1,049.99 Save \$450.00</p> <p>From \$599.99 with trade-in⁰</p> <p>LEARN MORE BUY NOW</p> </div> <div>  <p>Galaxy S21 5G 128GB</p> <p>\$799.99 Save \$350.00</p> <p>From \$449.99 with trade-in⁰</p> <p>LEARN MORE BUY NOW</p> </div> </div> |

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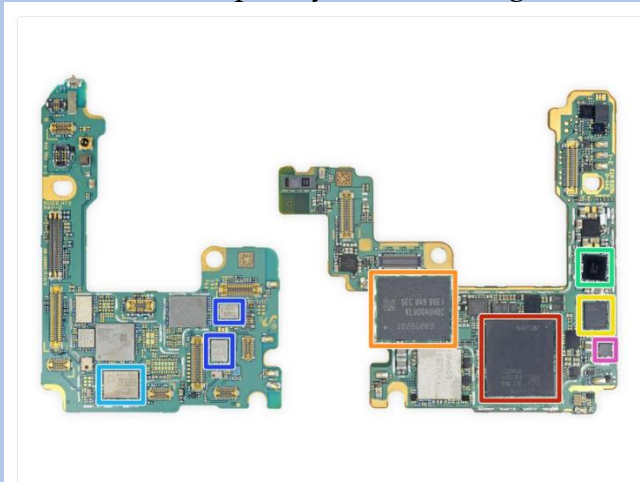
| US 8,510,407's Claim Limitation | Accused Instrumentality |
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| <p>the client computing device, wherein the frame of the viewer graphical user interface lacks controls for enabling a user to specify a network location at which content for the networked information monitor is available; and</p> | <p>Source: https://www.samsung.com/us/mobile/phones/galaxy-s/. Like the Samsung Galaxy S21, each of the other Accused Samsung Devices have flash memory that is electronic storage. Additionally, such electronic storage is shown, for example, by the following breakdown of the Samsung Galaxy S21 that</p> <div data-bbox="779 415 1856 911">  <ul style="list-style-type: none"> Do these boards look like howling dogs? Anyways, let's check out what makes this phone tick: Qualcomm Snapdragon 888 layered beneath Samsung K3LK4K40CM-BGCP 12 GB LPDDR5 RAM Samsung flash storage KLUDG4UHDG-B0E1 128 GB Qualcomm SMR526 5G modulator Maxim MAX77705C power management IC Qualcomm QPM5825 power management IC Qualcomm QDM5872 and QDM4820 Front-End Module Cirrus Logic CS35L40 audio amplifier IC </div> <p>shows flash storage: Source: https://www.ifixit.com/Teardown/Samsung+Galaxy+S21+Ultra+Teardown /141188</p> <p>And the electronic storage is configured to store networked information monitor template associated with a networked information monitor because it is able to store files containing NIM templates after downloading various applications. For example, Samsung configured the Accused Samsung Devices to download apps through the Galaxy Store (seen in the screen shot below), which comes pre-installed on Samsung phones.</p> |

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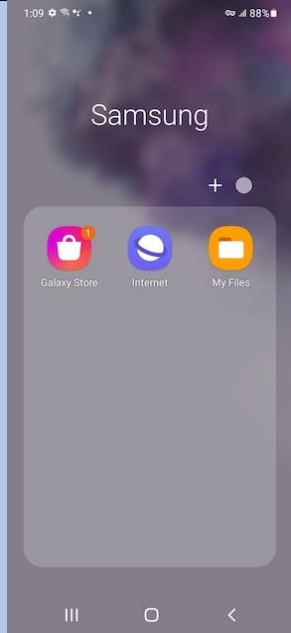
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| | <div data-bbox="1087 289 1375 917">A screenshot of a Samsung smartphone home screen. The status bar at the top shows the time 1:09, signal strength, Wi-Fi, and 88% battery. The background is a dark, abstract image. The word "Samsung" is centered at the top. Below it is a dock with three app icons: "Galaxy Store" (a red shopping bag icon), "Internet" (a blue globe icon), and "My Files" (an orange folder icon). The bottom of the screen shows the Android navigation bar with three icons: a square, a circle, and a triangle.</div> <p data-bbox="489 966 1938 1083">In the Galaxy Store app, a search for “weather” displays various weather apps. Scrolling down and the “Weather Channel for Samsung” app is visible, image below left, which can be clicked on for more details, below right. This provides an ‘Install’ button as seen below right.</p> |

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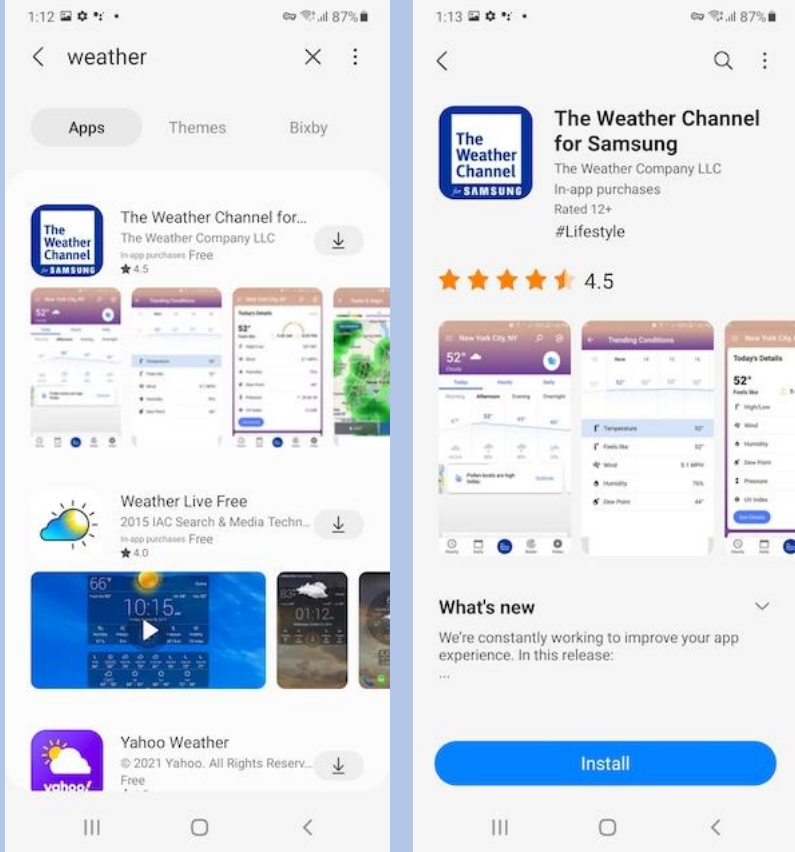
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| | <div data-bbox="487 289 1276 1136">  </div> <p data-bbox="487 1185 1936 1351">In this example, the “Weather Channel for Samsung” app is downloaded as an APK file. The APK files for the Samsung-Supported Apps includes definition of a viewer graphical user interface having a frame. In particular, the data structures in the APK are used to define a viewer graphical user interface (e.g., a user interface presented on the screen) that may include menus, buttons, and other features.</p> |

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| | <p>The data structures in APK files for each Samsung-Supported App contain the files defining the visual presentation of the application, as suggested by Android developer guides, and seen in the excerpt below:</p> <div data-bbox="690 451 1774 711" data-label="Text"> <p>App resources</p> <p>An Android app is composed of more than just code—it requires resources that are separate from the source code, such as images, audio files, and anything relating to the visual presentation of the app. For example, you can define animations, menus, styles, colors, and the layout of activity user interfaces with XML files. Using app resources makes it easy to update various characteristics of your app without modifying code. Providing sets of alternative resources enables you to optimize your app for a variety of device configurations, such as different languages and screen sizes.</p> <p>Source: https://developer.android.com/guide/components/fundamentals</p> </div> <p>Indeed, in Android development the UI is typically built using “Layouts” which define “Views” which are defined in XML and generally create elements the user can view and/or interact with.</p> <ul style="list-style-type: none"> • “A layout defines the structure for a user interface in your app, such as in an activity. All elements in the layout are built using a hierarchy of View and ViewGroup objects. A View usually draws something the user can see and interact with.” <p>And, according to the Android documentation these elements are created with XML:</p> <ul style="list-style-type: none"> • “Declare UI elements in <i>XML</i>. Android provides a straightforward <i>XML</i> vocabulary that corresponds to the View classes and subclasses, such as those for widgets and layouts. <p>You can also use Android Studio's Layout Editor to build your XML layout using a drag-and-drop interface.”</p> |

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| | <ul style="list-style-type: none"> • <i>"Declaring your UI in XML allows you to separate the presentation of your app from the code that controls its behavior. Using XML files also makes it easy to provide different layouts for different screen sizes and orientations"</i> • <i>"The Android framework gives you the flexibility to use either or both of these methods to build your app's UI. For example, you can declare your app's default layouts in XML, and then modify the layout at runtime."</i> • <i>"Write the XML. Using Android's XML vocabulary, you can quickly design UI layouts and the screen elements they contain, in the same way you create web pages in HTML"</i> <p>This graphical user interface defined by the NIM Template may be used to display time-varying content in a web browser-readable language on a display associated with the client computing device within the. For example, upon installation of the "Weather Channel for Samsung" app, a splash screen can be seen with the message 'Still waiting for server...' as it loads data to display.</p> |

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| | <div data-bbox="487 289 873 1136"></div> <p data-bbox="487 1177 1938 1300">Upon loading this data, the screen shows the time-varying content (<i>e.g., the numeric display of time-varying temperature, or graphic display of time-varying weather conditions</i>) for the weather based on the current date and for the location of the phone, as shown below.</p> |

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| | <div data-bbox="491 289 1285 1136"> <p>The image displays two side-by-side screenshots of a mobile weather application. The left screenshot shows the current weather (65°F, Fair/Wind) and an hourly forecast for San Bruno, CA. The right screenshot shows the same interface but with a search bar at the top and a keyboard visible at the bottom, indicating a search for a different location.</p> </div> <p>Furthermore, the time-varying content is displayed in a frame of the viewer graphical user interface that lacks controls for enabling a user to specify a network location at which content for the networked information monitor is available. Put another way, a user is unable to designate from which server the weather information should be downloaded.</p> |

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| | <p>Furthermore on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that the networked information monitor template having therein a definition of a viewer graphical user interface having a frame within which time-varying content in a web browser-readable language may be presented on a display associated with the client computing device, wherein the frame of the viewer graphical user interface lacks controls for enabling a user to specify a network location at which content for the networked information monitor is available. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |
| <p>one or more processors configured to execute one or more computer program modules, the one or more computer program modules being configured to access the networked information monitor defined by the networked information</p> | <p>The Accused Samsung Devices have one or more processors configured to execute one or more computer program modules, the one or more computer program modules being configured to access the networked information monitor defined by the networked information monitor template.</p> <p>Specifically, each of the Accused Samsung Devices uses the Samsung Exynos or Qualcomm Snapdragon processors that are processors configured to execute one or more program modules to access the networked information monitor, defined by the networked information monitor template. The Samsung web page details the Samsung Exynos processors used in the Accused Samsung Devices.</p> |

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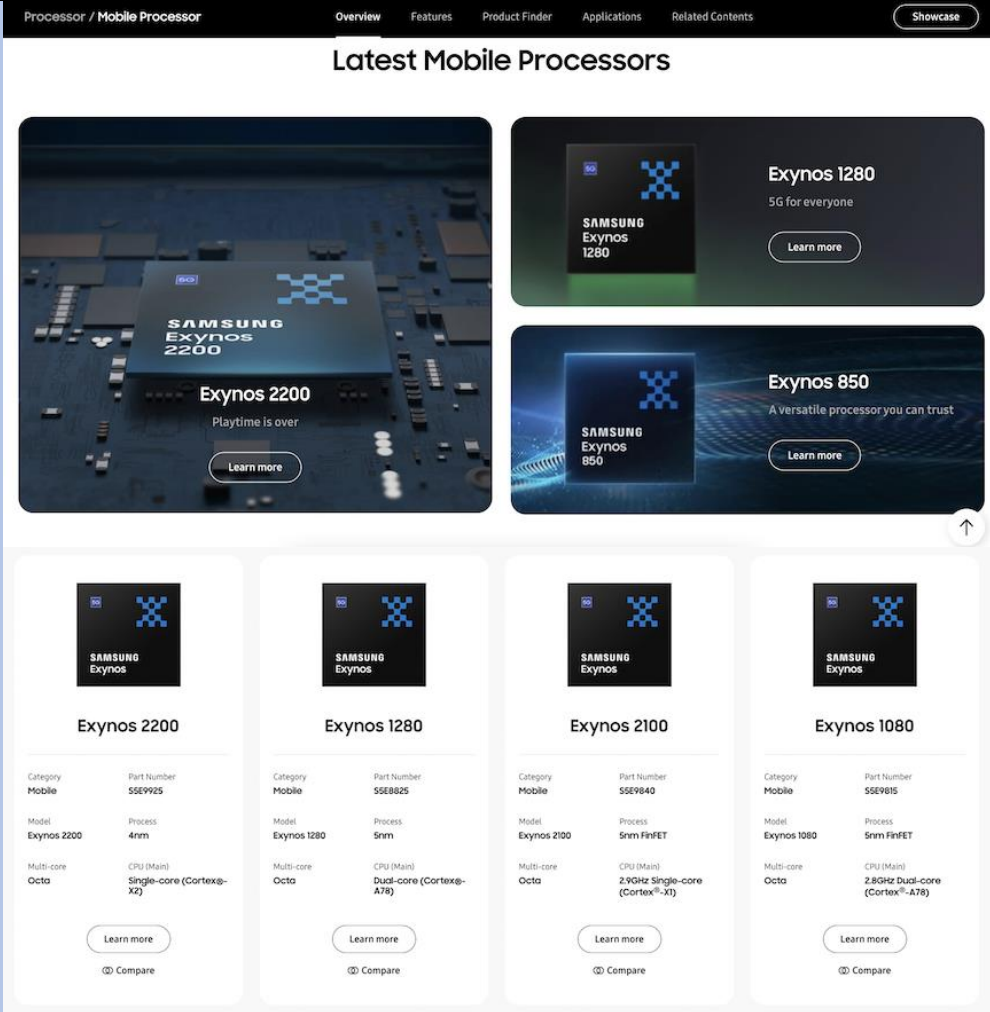
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|---|---|----------|-------------|--------|---------|-------|---------|-------------|-----|------------|------------|------|--------------------------|----------|-------------|--------|---------|-------|---------|-------------|-----|------------|------------|------|-------------------------|----------|-------------|--------|---------|-------|---------|-------------|------------|------------|------------|------|---------------------------------|----------|-------------|--------|---------|-------|---------|-------------|------------|------------|------------|------|--------------------------------|
| monitor template, wherein accessing the networked information monitor defined by the networked information monitor template results in: |  <p>The screenshot displays the Samsung Exynos website for mobile processors. The header includes navigation links: Processor / Mobile Processor, Overview, Features, Product Finder, Applications, Related Contents, and a Showcase button. The main heading is 'Latest Mobile Processors'. Below this, there are four featured processor cards: Exynos 2200 (with a 'Playtime is over' tagline), Exynos 1280 (with a '5G for everyone' tagline), Exynos 850 (with a 'A versatile processor you can trust' tagline), and Exynos 2100. Each card includes a 'Learn more' button. At the bottom, there is a grid of four product cards for Exynos 2200, Exynos 1280, Exynos 2100, and Exynos 1080. Each card in the grid provides technical specifications in a table format and includes 'Learn more' and 'Compare' buttons.</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>Mobile</td> <td>S5E9925</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Model</th> <th>Process</th> </tr> </thead> <tbody> <tr> <td>Exynos 2200</td> <td>4nm</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Multi-core</th> <th>CPU (Main)</th> </tr> </thead> <tbody> <tr> <td>Octa</td> <td>Single-core (Cortex®-X2)</td> </tr> </tbody> </table> <p>Learn more Compare</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>Mobile</td> <td>S5E0825</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Model</th> <th>Process</th> </tr> </thead> <tbody> <tr> <td>Exynos 1280</td> <td>5nm</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Multi-core</th> <th>CPU (Main)</th> </tr> </thead> <tbody> <tr> <td>Octa</td> <td>Dual-core (Cortex®-A78)</td> </tr> </tbody> </table> <p>Learn more Compare</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>Mobile</td> <td>S5E0840</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Model</th> <th>Process</th> </tr> </thead> <tbody> <tr> <td>Exynos 2100</td> <td>5nm FinFET</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Multi-core</th> <th>CPU (Main)</th> </tr> </thead> <tbody> <tr> <td>Octa</td> <td>2.90Hz Single-core (Cortex®-X1)</td> </tr> </tbody> </table> <p>Learn more Compare</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Part Number</th> </tr> </thead> <tbody> <tr> <td>Mobile</td> <td>S5E0815</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Model</th> <th>Process</th> </tr> </thead> <tbody> <tr> <td>Exynos 1080</td> <td>5nm FinFET</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Multi-core</th> <th>CPU (Main)</th> </tr> </thead> <tbody> <tr> <td>Octa</td> <td>2.80Hz Dual-core (Cortex®-A78)</td> </tr> </tbody> </table> <p>Learn more Compare</p> | Category | Part Number | Mobile | S5E9925 | Model | Process | Exynos 2200 | 4nm | Multi-core | CPU (Main) | Octa | Single-core (Cortex®-X2) | Category | Part Number | Mobile | S5E0825 | Model | Process | Exynos 1280 | 5nm | Multi-core | CPU (Main) | Octa | Dual-core (Cortex®-A78) | Category | Part Number | Mobile | S5E0840 | Model | Process | Exynos 2100 | 5nm FinFET | Multi-core | CPU (Main) | Octa | 2.90Hz Single-core (Cortex®-X1) | Category | Part Number | Mobile | S5E0815 | Model | Process | Exynos 1080 | 5nm FinFET | Multi-core | CPU (Main) | Octa | 2.80Hz Dual-core (Cortex®-A78) |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9925 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Process | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Exynos 2200 | 4nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Octa | Single-core (Cortex®-X2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E0825 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Process | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Exynos 1280 | 5nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Octa | Dual-core (Cortex®-A78) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E0840 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Process | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Exynos 2100 | 5nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Octa | 2.90Hz Single-core (Cortex®-X1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E0815 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Process | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Exynos 1080 | 5nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Octa | 2.80Hz Dual-core (Cortex®-A78) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| US 8,510,407's Claim Limitation | Accused Instrumentality | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|----------|-------------|--------|---------|-------|-------------|---------|------------|------------|---------------------------------------|---|----------|-------------|--------|---------|-------|-------------|---------|----------------|------------|-------------------------------|--|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|---------------------------------------|--|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|---------------------------------------|
| | <div><p>Exynos 880</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E8805</td></tr><tr><td>Model</td><td>Exynos 880</td></tr><tr><td>Process</td><td>8nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A77 2.0GHz Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E8805 | Model | Exynos 880 | Process | 8nm FinFET | Multi-core | CPU (Main) Cortex®-A77 2.0GHz Dual | <div><p>Exynos 850</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E850</td></tr><tr><td>Model</td><td>Exynos 850</td></tr><tr><td>Process</td><td>8nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A55</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E850 | Model | Exynos 850 | Process | 8nm FinFET | Multi-core | CPU (Main) Cortex®-A55 | <div><p>Exynos 990</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E990</td></tr><tr><td>Model</td><td>Exynos 990</td></tr><tr><td>Process</td><td>7nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Custom CPU Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E990 | Model | Exynos 990 | Process | 7nm FinFET | Multi-core | CPU (Main) Custom CPU Dual | <div><p>Exynos 980</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E980</td></tr><tr><td>Model</td><td>Exynos 980</td></tr><tr><td>Process</td><td>8nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A77 2.2GHz Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E980 | Model | Exynos 980 | Process | 8nm FinFET | Multi-core | CPU (Main) Cortex®-A77 2.2GHz Dual |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E8805 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 880 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 8nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A77 2.0GHz Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E850 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 850 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 8nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A55 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 7nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Custom CPU Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E980 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 980 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 8nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A77 2.2GHz Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <div><p>Exynos 9825</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9825</td></tr><tr><td>Model</td><td>Exynos 9825</td></tr><tr><td>Process</td><td>7nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Custom CPU Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9825 | Model | Exynos 9825 | Process | 7nm FinFET | Multi-core | CPU (Main) Custom CPU Dual | <div><p>Exynos 9820</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9820</td></tr><tr><td>Model</td><td>Exynos 9820</td></tr><tr><td>Process</td><td>8nm LPP FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Custom CPU Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9820 | Model | Exynos 9820 | Process | 8nm LPP FinFET | Multi-core | CPU (Main) Custom CPU Dual | <div><p>Exynos 9611</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9611</td></tr><tr><td>Model</td><td>Exynos 9611</td></tr><tr><td>Process</td><td>10nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 2.3GHz Quad</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9611 | Model | Exynos 9611 | Process | 10nm FinFET | Multi-core | CPU (Main) Cortex®-A73 2.3GHz Quad | <div><p>Exynos 9610</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9610</td></tr><tr><td>Model</td><td>Exynos 9610</td></tr><tr><td>Process</td><td>10nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 2.3GHz Quad</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9610 | Model | Exynos 9610 | Process | 10nm FinFET | Multi-core | CPU (Main) Cortex®-A73 2.3GHz Quad |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9825 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9825 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 7nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Custom CPU Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9820 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9820 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 8nm LPP FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Custom CPU Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9611 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9611 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 10nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 2.3GHz Quad | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9610 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9610 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 10nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 2.3GHz Quad | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407









| US 8,510,407's Claim Limitation | Accused Instrumentality | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|--|--|----------|-------------|--------|---------|-------|-------------|---------|----------------|------------|--|--|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|--|--|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|--|
| | <div><p>Exynos 9609</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9609</td></tr><tr><td>Model</td><td>Exynos 9609</td></tr><tr><td>Process</td><td>10nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 2.2GHz Quad</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9609 | Model | Exynos 9609 | Process | 10nm FinFET | Multi-core | CPU (Main) Cortex®-A73 2.2GHz Quad | <div><p>Exynos 7904</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E7904</td></tr><tr><td>Model</td><td>Exynos 7904</td></tr><tr><td>Process</td><td>14nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 1.8GHz Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E7904 | Model | Exynos 7904 | Process | 14nm FinFET | Multi-core | CPU (Main) Cortex®-A73 1.8GHz Dual | <div><p>Exynos 7884</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E7885</td></tr><tr><td>Model</td><td>Exynos 7884</td></tr><tr><td>Process</td><td>14nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 1.6GHz Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E7885 | Model | Exynos 7884 | Process | 14nm FinFET | Multi-core | CPU (Main) Cortex®-A73 1.6GHz Dual | <div><p>Exynos 9810</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9810</td></tr><tr><td>Model</td><td>Exynos 9810</td></tr><tr><td>Process</td><td>10nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Custom CPU 2.9GHz Quad</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9810 | Model | Exynos 9810 | Process | 10nm FinFET | Multi-core | CPU (Main) Custom CPU 2.9GHz Quad |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9609 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9609 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 10nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 2.2GHz Quad | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E7904 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 7904 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 14nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 1.8GHz Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E7885 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 7884 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 14nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 1.6GHz Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9810 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9810 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 10nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Custom CPU 2.9GHz Quad | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <div><p>Exynos 9825</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9825</td></tr><tr><td>Model</td><td>Exynos 9825</td></tr><tr><td>Process</td><td>7nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Custom CPU Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9825 | Model | Exynos 9825 | Process | 7nm FinFET | Multi-core | CPU (Main) Custom CPU Dual | <div><p>Exynos 9820</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9820</td></tr><tr><td>Model</td><td>Exynos 9820</td></tr><tr><td>Process</td><td>8nm LPP FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Custom CPU Dual</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9820 | Model | Exynos 9820 | Process | 8nm LPP FinFET | Multi-core | CPU (Main) Custom CPU Dual | <div><p>Exynos 9611</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9611</td></tr><tr><td>Model</td><td>Exynos 9611</td></tr><tr><td>Process</td><td>10nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 2.3GHz Quad</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9611 | Model | Exynos 9611 | Process | 10nm FinFET | Multi-core | CPU (Main) Cortex®-A73 2.3GHz Quad | <div><p>Exynos 9610</p><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9610</td></tr><tr><td>Model</td><td>Exynos 9610</td></tr><tr><td>Process</td><td>10nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 2.3GHz Quad</td></tr></table><div>Learn more</div><div>Compare</div></div> | Category | Part Number | Mobile | S5E9610 | Model | Exynos 9610 | Process | 10nm FinFET | Multi-core | CPU (Main) Cortex®-A73 2.3GHz Quad |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9825 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9825 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 7nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Custom CPU Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9820 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9820 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 8nm LPP FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Custom CPU Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9611 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9611 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 10nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 2.3GHz Quad | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9610 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9610 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 10nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 2.3GHz Quad | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407





| US 8,510,407's Claim Limitation | Accused Instrumentality | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|--|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|--|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|--|----------|-------------|--------|---------|-------|-------------|---------|-------------|------------|---|
| | <div><div><div><div></div><div>Exynos 9609</div><div><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9609</td></tr><tr><td>Model</td><td>Exynos 9609</td></tr><tr><td>Process</td><td>10nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 2.2GHz Quad</td></tr></table><div>Learn more</div><div>Compare</div></div></div><div><div></div><div>Exynos 7904</div><div><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E7904</td></tr><tr><td>Model</td><td>Exynos 7904</td></tr><tr><td>Process</td><td>14nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 1.8GHz Dual</td></tr></table><div>Learn more</div><div>Compare</div></div></div><div><div></div><div>Exynos 7884</div><div><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E7885</td></tr><tr><td>Model</td><td>Exynos 7884</td></tr><tr><td>Process</td><td>14nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Cortex®-A73 1.6GHz Dual</td></tr></table><div>Learn more</div><div>Compare</div></div></div><div><div></div><div>Exynos 9810</div><div><table><tr><td>Category</td><td>Part Number</td></tr><tr><td>Mobile</td><td>S5E9810</td></tr><tr><td>Model</td><td>Exynos 9810</td></tr><tr><td>Process</td><td>10nm FinFET</td></tr><tr><td>Multi-core</td><td>CPU (Main) Custom CPU 2.9GHz Quad</td></tr></table><div>Learn more</div><div>Compare</div></div></div></div><div><p>References:</p><ul style="list-style-type: none">• https://en.wikipedia.org/wiki/Samsung_Galaxy_S20• https://semiconductor.samsung.com/processor/mobile-processor/• https://android.fandom.com/wiki/List_of_Samsung_Galaxy_devices• https://en.wikipedia.org/wiki/Comparison_of_Samsung_Galaxy_S_smartphones<p>Evidence that the processors are configured to execute one or more program modules (i.e., Samsung OS along with other software) to access the networked information monitor, defined by the networked information monitor template is shown from the fact that all processors can run any software installed on the Accused Samsung Device after installation.</p><p>Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that there are “one or more processors configured to execute one or more computer program modules, the one or more computer program modules being configured</p></div></div> | Category | Part Number | Mobile | S5E9609 | Model | Exynos 9609 | Process | 10nm FinFET | Multi-core | CPU (Main) Cortex®-A73 2.2GHz Quad | Category | Part Number | Mobile | S5E7904 | Model | Exynos 7904 | Process | 14nm FinFET | Multi-core | CPU (Main) Cortex®-A73 1.8GHz Dual | Category | Part Number | Mobile | S5E7885 | Model | Exynos 7884 | Process | 14nm FinFET | Multi-core | CPU (Main) Cortex®-A73 1.6GHz Dual | Category | Part Number | Mobile | S5E9810 | Model | Exynos 9810 | Process | 10nm FinFET | Multi-core | CPU (Main) Custom CPU 2.9GHz Quad |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9609 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9609 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 10nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 2.2GHz Quad | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E7904 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 7904 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 14nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 1.8GHz Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E7885 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 7884 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 14nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Cortex®-A73 1.6GHz Dual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Category | Part Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile | S5E9810 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | Exynos 9810 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process | 10nm FinFET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi-core | CPU (Main) Custom CPU 2.9GHz Quad | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| | to access the networked information monitor defined by the networked information monitor template." Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner. |
| transmission, over a network to a web server at a network location, of a content request for content to be displayed within the frame of the viewer graphical user interface defined by the networked information monitor template; | <p>The Accused Instrumentalities transmit, over a network to a web server at a network location, a content request for content to be displayed within the frame of the viewer graphical user interface defined by the networked information monitor template. For example, using an Android app created through Android Studio, Android's development environment, a URL embedded in an exemplary NIM Template. Specifically, fennetic.net/irc/finney.org/~hal/home.html</p> <p>Upon running the NIM one of the Accused Instrumentalities, the following content was displayed</p> |

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| | <div data-bbox="489 289 907 1214"></div> <p data-bbox="489 1263 1955 1386">Display of this information confirms that the Accused Instrumentalities transmit over a network to a web server at a network location, of a content request for content to be displayed within the frame of the viewer graphical user interface defined by the networked information monitor template.</p> |

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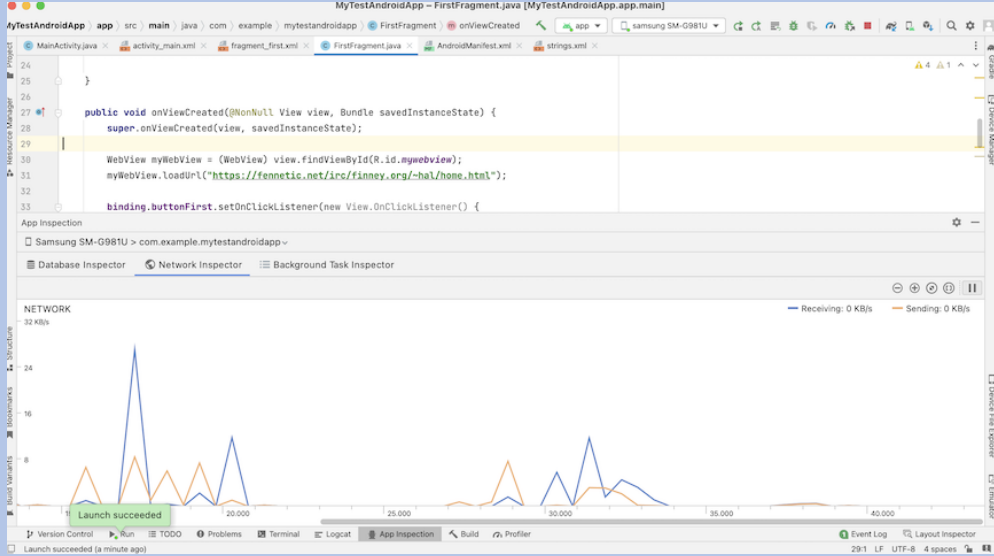
| US 8,510,407's Claim Limitation | Accused Instrumentality |
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| | <p>In fact, monitoring the network traffic during the load of this content reveals that a network request was initiated and content was received as shown in the image below of the 'Network Inspector' analysis tool which is part of the Android Studio development suite. This monitoring shows that the Accused Samsung Devices transmit over a network to a web server at a network location a content request. And the display of the App shows that that content requests includes a request for content to be displayed within the frame of the viewer graphical user interface defined by the networked information monitor template.</p>  <p>Furthermore, the above network activity confirms that the content request was exchanged over a network server and its display on the Accused Instrumentalities confirms that the content can be displayed within the frame of the viewer graphical user interface defined by the networked information monitor</p> |

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| | <p>template. And, the content below is the HTML data on the server that was transferred over the network to display the view shown in the 'Hal Finney Home Page' image above.</p> <pre> <http> <head><TITLE>Hal Finney Home Page</TITLE></head> <body> <H1>Hal Finney Home Page</H1> <p> <H2>Bio</H2> Born May 4, 1956. BS Engineering 1979, California Institute of Technology. Married, two children. <hr> <H2>PGP</H2> I was one of the original programmers on PGP version 2.0, working directly with Philip Zimmermann, author of the program. <p> Today, I work for PGP Corporation., developing crypto library components. <H2>RPOW</H2> I recently created the RPOW.NET server for accumulating and exchanging Reusable Proofs of Work. See that link for more information on the concepts behind this unusual service. <H2>SSL Challenge</H2> In August, 1995 I submitted a challenge to the cryptographic community to try breaking a sample web browsing session run in secure mode using Netscape's Secure Socket Layer (SSL) protocol. Both long and short versions of the challenge document are available. The challenge was broken in short order. Look for more information on the SSL Challenge Break. <P> <H2>Old Essays</H2> These are some essays I wrote for publication on the Cypherpunks list back in the early to mid 1990s. <H3>PGP</H3> Phil Zimmermann's public-key encryption program PGP has excited tremendous interest in cryptography. <DL> <DT> Truly Stealthy PGP <DD> For some applications PGP may stick out like a sore thumb. A variant known as "Stealth PGP" makes it less conspicuous, but the "stealthiness" is less than perfect. This article analyzes what would be necessary to make it truly stealthy. <DT> PGP Math Library Docs <DD> </pre> |

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| | <p>Documentation on how the math functions in PGP's math library work.</p> <p><DT></p> <p></p> <p>PGP Web of Trust</p> <p><DD></p> <p>PGP's "web of trust" is the source of many misconceptions.</p> <p>Will this model be adequate for large-scale usage on the global nets?</p> <p></DL></p> <p><H3>Digital Cash</H3></p> <p><DL></p> <p><DT></p> <p></p> <p>Chaum's Cash System</p> <p><DD></p> <p>This writeup attempts to describe the mathematics behind the basic Digital Cash system from David Chaum et al. How can honest users of the system keep their anonymity while cheaters who double-spend are exposed? This essay has been widely republished on the net.</p> <p><DT></p> <p></p> <p>Digital Cash and Privacy</p> <p><DD></p> <p>Digital cash could play an important role in protecting privacy in a world where more and more transactions will take place electronically.</p> <p><DT></p> <p></p> <p>Problems with Observers</p> <p><DD></p> <p>Recent digital cash proposals from David Chaum and affiliated researchers include the notion of an "observer" chip which resides in the digital "wallet" and makes sure that no double-spending occurs. This essay criticizes this approach.</p> <p><DT></p> <p></p> <p>The Beauty of ECash</p> <p><DD></p> <p>A somewhat facetious essay about the joy of collecting electronic cash. Admire the unique beauty of each digital banknote!</p> <p><DT></p> <p></p> <p>Criticism of NetCash</p> <p><DD></p> <p>A group with USC/ISI has produced a digital cash proposal called NetCash. I describe some fundamental problems with their system.</p> <p><DT></p> <p></p> <p>Blind Signature Patents</p> <p><DD></p> <p>Digital cash is heavily patented. These are the results of a patent search on the blind signatures which are the foundation of digital cash algorithms.</p> <p></DL></p> <p><H3>Anonymous Remailers</H3></p> <p>At one time I operated two anonymous remailers.</p> <p>(For more information and a list of remailers look</p> <p> here.)</p> |

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| | <p>These articles discuss some technical and social issues raised by these controversial services.<P></p> <p><DL></p> <p><DT></p> <p></p> <p>Why Remailers I</p> <p><DD></p> <p>One of the first articles I wrote explaining how I became interested in cryptography in general and remailers in particular. What is the role of anonymous remailers in a society which uses cryptography to protect privacy?</p> <p><DT></p> <p></p> <p>Why Remailers II</p> <p><DD></p> <p>A more wide-ranging discussion of the roles remailers can play.</p> <p><DT></p> <p></p> <p>For-Pay Remailers</p> <p><DD></p> <p>What if remailers charged per message? How much should they charge, and how would it affect ease of use?</p> <p>Includes a</p> <p></p> <p>discussion of four different Internet payment systems</p> <p>and an evaluation of their suitability for this purpose.</p> <p><DT></p> <p></p> <p>Remailer Abuse Prevention</p> <p><DD></p> <p>How can abuse of remailers be dealt with when the abusers themselves are anonymous to the remailer operators?</p> <p>The "credential" notion of David Chaum applies to this situation.</p> <p>Plus, the existing "Magic Money" code could be easily adapted to this purpose.</p> <p><DT></p> <p></p> <p>Is-A-Person Credentials</p> <p><DD></p> <p>Not directly related to remailers, but this is a further description of the notion of "credentials", similar to my suggestion above for remailer abuse prevention.</p> <p></DL></p> <p><H3>Politics</H3></p> <p>Unlike many early Cypherpunks, I never viewed cryptography as a gateway to a libertarian society. My goals are more modest but still worthwhile, I hope.</p> <p><DL></p> <p><DT></p> <p></p> <p>Politics vs Technology</p> <p><DD></p> <p>Will cryptographic technology by itself be enough to bring about changes sufficient to ensure privacy?</p> <p>Or will political struggle continue to be necessary?</p> <p><DT></p> |

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| | <pre> Steganography no Solution <DD> Steganography is the art of hiding messages in innocuous data. Even in the face of harsh crackdowns it should still be possible to send messages using this technology. Does that imply that restrictions on cryptography are doomed? <DT> Liberty and Democracy <DD> A short note describing the fundamental reason why democracy makes sense. </DL> </body> </http> </pre> <p>Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate transmission, over a network to a web server at a network location, of a content request for content to be displayed within the frame of the viewer graphical user interface defined by the networked information monitor template. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |
| reception, over the network from the web server at the network location, of content transmitted from the web server in response to the content request, | <p>The Accused Instrumentalities receive, over the network from the web server at the network location, content transmitted from the web server in response to the content request, the content being time-varying.</p> <p>Note that upon first use of the Weather Channel App for Samsung, the device prompts you for permission to get location info so it can provide up-to-date weather for your current location. The message below shows the prompt provided if the user settings are not set appropriately. The image on the right displays the settings for this app.</p> |

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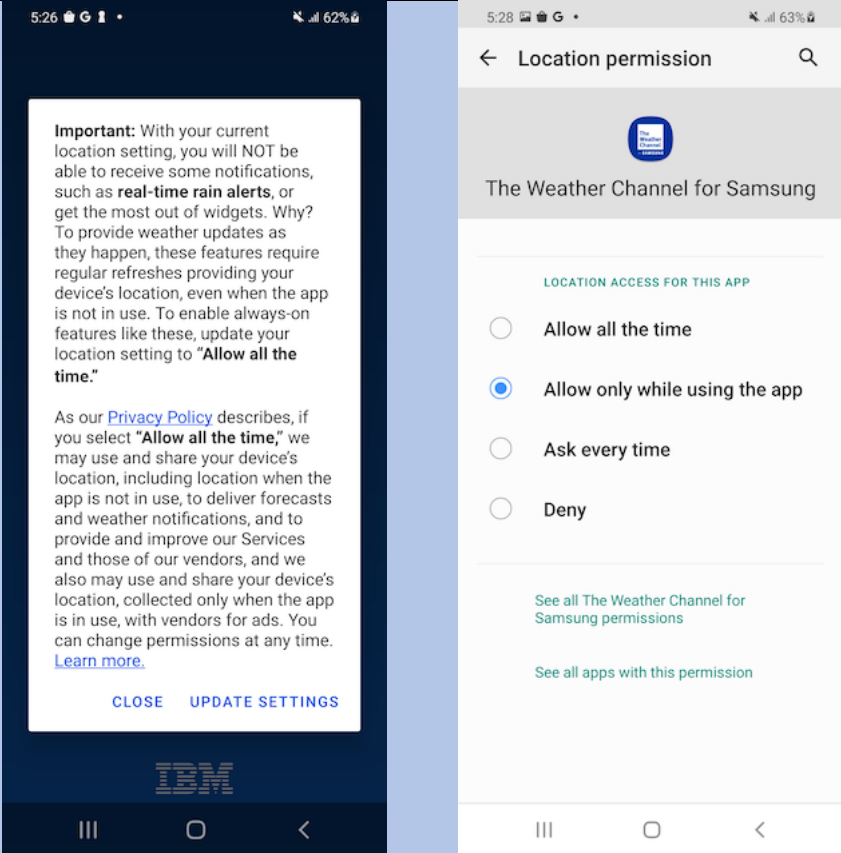
| US 8,510,407’s Claim Limitation | Accused Instrumentality |
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| the content being time-varying; | <div data-bbox="506 289 1341 1136"></div> <p data-bbox="489 1214 1976 1417">And with these settings, there is evidence of reception over the network from the web server, of content transmitted from the web server below. In particluar the image below shows how the app automatically determines the user location and displays time-varying weather content for the current location, as shown in the two screenshots below. Further on infromation and belief, that web server is located at the network location.</p> |

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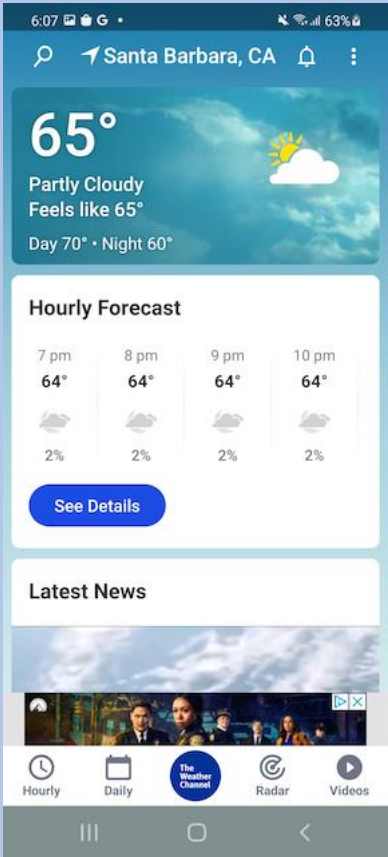
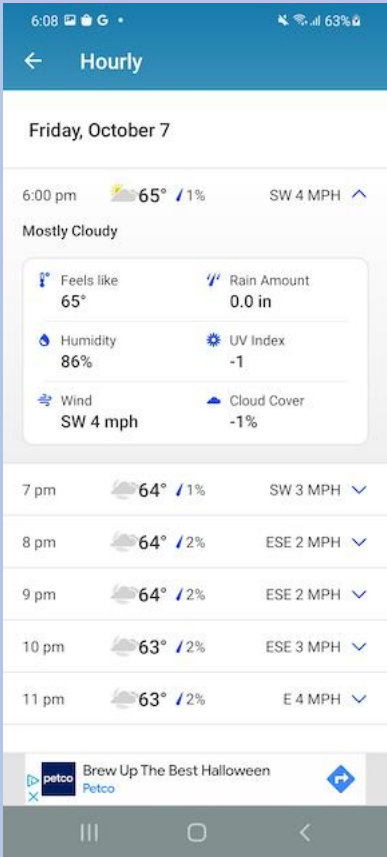
| US 8,510,407's Claim Limitation | Accused Instrumentality |
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| | <div data-bbox="497 323 882 1174"></div> <div data-bbox="926 323 1310 1174"></div> <p data-bbox="489 1214 1892 1425">Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate reception, over the network from the web server at the network location, of content transmitted from the web server in response to the content request, the content being time-varying. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |

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| presentation, on the display, of the viewer graphical user interface defined by the networked information monitor template outside of and separate from any graphical user interface of any other application; and | <p>The Accused Instrumentalities present, on the display, of the viewer graphical user interface defined by the networked information monitor template outside of and separate from any graphical user interface of any other application.</p> <p>On information and belief, the image below left shows the Weather Channel App for Samsung in a full sized frame, while the image on the right is a widget that is displayed in a smaller frame with a transparent background. That display evinces the “presentation, on the display.” Furthermore, this display of information, on the left, demonstrates the ability to present information on the visual graphical user interface “outside of and separate from any graphical user interface of any other application.” Notably, the information in both examples are separate from the GUI of any other app being run by the accused Samsung device. This demonstrates that the frame is outside of and separate from any graphical user interface of any other application.</p> |

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| | <div data-bbox="516 289 1285 1136"> </div> <p data-bbox="485 1179 1961 1386">Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate reception presentation, on the display, of the viewer graphical user interface defined by the networked information monitor template outside of and separate from any graphical user interface of any other application. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |

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| presentation, on the display within the frame of the viewer graphical user interface defined by the networked information monitor, of the time-varying content received from the web server. | In the example below, the Accused Samsung Devices present on the display within the frame of the viewer graphical user interface defined by the networked information monitor, the time-varying content received from the web server . In particular, the weather data received from the network is shown within the app, as seen below. The exemplary time-varying content is the weather data. |

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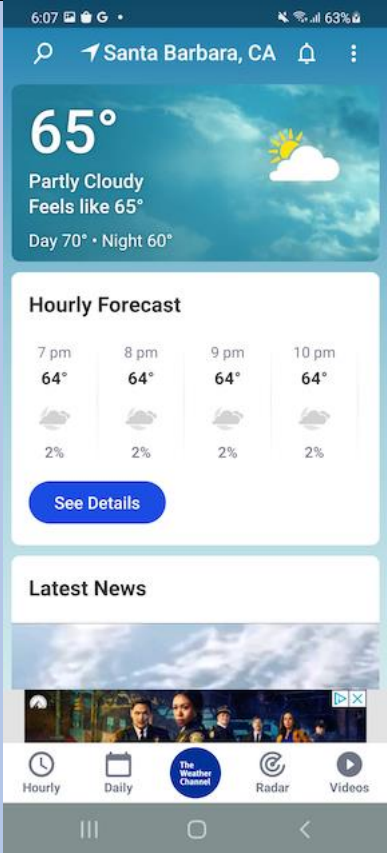
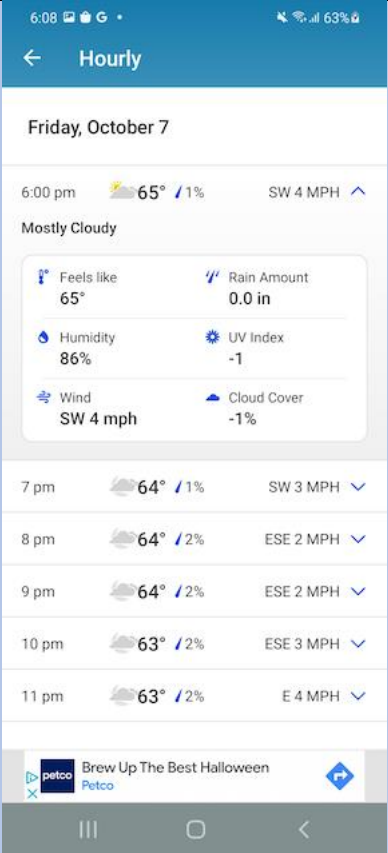
| US 8,510,407’s Claim Limitation | Accused Instrumentality |
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| | <div data-bbox="489 289 873 1136"></div> <div data-bbox="919 289 1304 1136"></div> <p>Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate presentation, on the display within the frame of the viewer graphical user interface defined by the networked information monitor, of the time-varying content received from the web server. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |

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| <p>2. The method of claim 1, further comprising, responsive to reception of one or more elements included in the received time-varying content, modifying a feature of said viewer graphical user interface defined by the networked information monitor template in accordance with a modification corresponding to the received one or more elements.</p> | <p>Claim 2 contains a typographical error. Based on the totality of intrinsic evidence, “the method” actually refers to the “client computing device” of Claim 1. Indeed, the prosecution history of the '407 patent demonstrates that the allowed claims recited “client computing device.” For the reasons stated above, the Accused Instrumentalities meet the limitations of Claim 1.</p> <p>Moreover, the Accused Instrumentalities further comprise a response to reception of one or more elements included in the received time-varying content, modifying a feature of said viewer graphical user interface defined by the networked information monitor template in accordance with a modification corresponding to the received one or more elements.</p> <p>In the weather app example below, time-varying content is received and the graphical user interface modified to be viewed. The content which is of web browser-readable language is then presented on the display of the client computing device. Notice the display of a special clickable alert due to a hazardous surf warning. The addition of a new element with which the user can interact is a modification of the app's graphical user interface. Within this example, the one or more elements included in the received time-varying content is the data concerning the hazardous surf warning.</p> <p>And, evidence of the modification to said viewer graphical user interface defined by the networked information monitor template in accordance with a modification corresponding to the received one or more elements is shown by the ability to scroll downwards through the application to view additional weather data, including hourly data, as shown below. Notably, the display area for the one or more elements is seen as one scrolls down the page, demonstrating that the GUI is being modified based on the reception of additional elements (e.g., weather information). Because the GUI is extended to display all of the content, on information and belief, this demonstrates that the GUI is being modified.</p> |

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| | <div></div> <div></div> |

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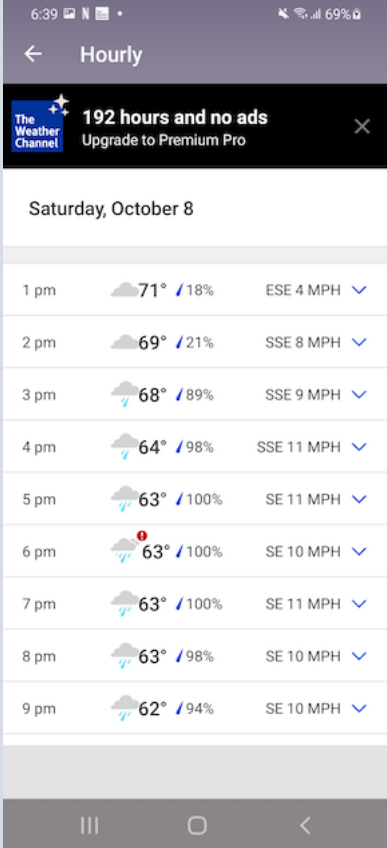
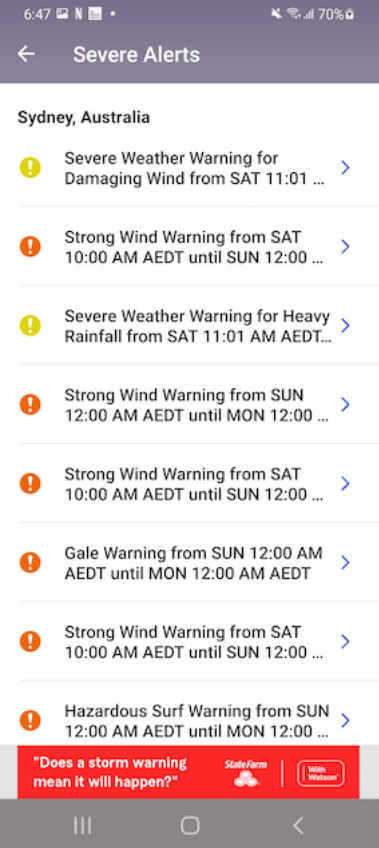
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| | <p>Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate responsive to reception of one or more elements included in the received time-varying content, modifying a feature of said viewer graphical user interface defined by the networked information monitor template in accordance with a modification corresponding to the received one or more elements. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> | |

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| | |
| <p>3. The client computing device of claim 2, wherein said modification corresponding to the received one or more elements comprises a modification to an image defined by the networked information monitor template as forming a part of said viewer graphical user interface.</p> | <p>The Accused Instrumentalities are client computing devices which meet the limitations of claim 2 for the reasons stated above.</p> <p>Additionally, the Accused Instrumentalities are further capable of a modification, corresponding to the received one or more elements comprises a modification to an image defined by the networked information monitor template as forming a part of said viewer graphical user interface. For example, in the Weather Channel App for Samsung, below, the images are modified to reflect the current weather. Note the rain icons below, as well as the modification of the background image to reflect 'Rain' and related imagery related to the current weather.</p> |

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| | <div data-bbox="485 289 1192 1003"> <p>The left screenshot shows a 'Daily' forecast for Sunday, October 9, with a temperature of 60°F and a chance of rain. The right screenshot shows an 'Hourly' forecast for Saturday, October 8, with a rain chart and a 'Feels like' temperature of 71°F. Red circles highlight specific UI elements in both screenshots.</p> </div> <p>Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate modification corresponding to the received one or more elements comprises a modification to an image defined by the networked information monitor template as forming a part of said viewer graphical user interface. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |
| 4. The client computing device of claim 2, | The Accused Instrumentalities are client computing devices which meet the limitations of claim 2 for the reasons stated above. |

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| wherein the correspondence between the modification and the received one or more elements is defined by the networked information monitor template. | <p>Additionally, within the Accused Instrumentalities, which are client computing devices, there is a correspondence between the modification and the received one or more elements is defined by the networked information monitor template. Specifically, it necessarily follows that if there is a modification, then code within the networked information monitor template defines how the modification is made based on the one or more elements.</p> <p>Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that the correspondence between the modification and the received one or more elements is defined by the networked information monitor template. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |
| 8. The client computing device of claim 1, wherein the networked information monitor template includes a markup language file. | <p>For the reasons stated above, the Accused Instrumentalities meet the limitations of Claim 1.</p> <p>The Accused Instrumentalities have a networked information monitor template that includes a markup language file. In the following examples, the contents of a Samsung App show that a NIM template comprises XML files which are then encoded into a binary format to create the downloadable app.</p> <p>In Android development the UI is typically built using "Layouts" which define "Views" which are defined in XML and generally create elements the user can view and/or interact with.</p> <ul style="list-style-type: none"> • "A layout defines the structure for a user interface in your app, such as in an activity. All elements in the layout are built using a hierarchy of View and ViewGroup objects. A View usually draws something the user can see and interact with." <p>According to the Android documentation these elements are created with XML:</p> |

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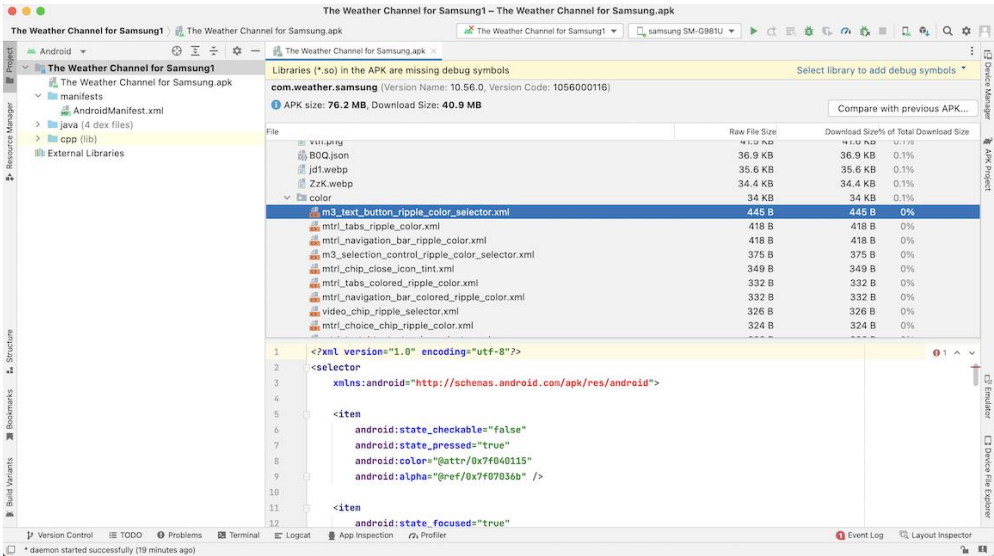
| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <ul style="list-style-type: none"> • <i>"Declare UI elements in XML. Android provides a straightforward XML vocabulary that corresponds to the View classes and subclasses, such as those for widgets and layouts.</i> <i>You can also use Android Studio's Layout Editor to build your XML layout using a drag-and-drop interface."</i> • <i>"Declaring your UI in XML allows you to separate the presentation of your app from the code that controls its behavior. Using XML files also makes it easy to provide different layouts for different screen sizes and orientations"</i> • <i>"The Android framework gives you the flexibility to use either or both of these methods to build your app's UI. For example, you can declare your app's default layouts in XML, and then modify the layout at runtime."</i> • <i>"Write the XML. Using Android's XML vocabulary, you can quickly design UI layouts and the screen elements they contain, in the same way you create web pages in HTML"</i> <p>When developing for Android using Android Studio, the user interface is defined by layouts expressed in the XML markup language.</p> <p>Once the application is ready for installation on a device, it is converted to an APK file which is a zipped file containing all the project resources. By renaming these files as zip files (changing the file extension from .apk to .zip) the files can be unzipped. After unzipping the apk file, the contents can be viewed as a directory as shown in the image below. Note the resources in the /res directory. These are images used for the UI as well as XML files defining the UI within the NIM template.</p> |

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The screenshot displays the 'res' directory in an Android Studio project. The directory is expanded, showing a list of resource files. The files are organized into a tree structure, with the 'res' directory at the top. The files include:

- color
- color-night-v8
- color-v23
- color-v31
- __N.xml
- _3J.png
- _4O.webp
- _6U.xml
- _7Y.png
- _8A.xml
- _9A.xml
- _9D.webp
- _9G.xml
- _9Y.xml
- _48.webp
- _68.9.png
- _86.webp
- _A0.xml
- _BC.xml
- _cx.xml
- _dw.xml
- _DZ.webp

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

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|---------------------------------|---|
| | <p>The XML files from the above directory listing are encoded in a binary format, however, they can be inspected using Android Studio. The APK files can be opened in Android Studio and inspected via the “Profile or Debug APK” feature. The .apk file for the Weather Channel App for Samsung can be opened using this capability which displays the contents of the NIM template as shown below.</p>  <p>Zooming in we can view the XML resource which defines the color and the dynamic behavior of a UI element.</p> |

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The screenshot displays the Android Studio environment. The top toolbar includes icons for running, debugging, and other development actions. The main window is divided into several panes. On the left, the 'Project' pane shows a file tree with folders like 'lib' and 'res', and files such as 'xq1.webp', 'Bfr.webp', 'OAx.webp', 'x4k.webp', 'hSe.webp', '_4O.webp', 'P7-.gif', 'H_o.webp', '1wd.webp', 'sq_.webp', and 'hv7.gif'. The 'APK Profiler' pane on the right shows a table of file sizes and download sizes. Below this, the 'Emulator' pane shows a preview of a globe image with a circular overlay. The bottom status bar indicates the image is 708x524 WEBP (32-bit color) and 261.5 kB.

| File | Raw File Size | Download Size | % of Total | Download Size |
|----------|---------------|---------------|------------|---------------|
| lib | 44.8 MB | 16.1 MB | 39.4% | |
| res | 7.5 MB | 7.3 MB | 17.8% | |
| xq1.webp | 314.6 KB | 314.7 KB | 0.8% | |
| Bfr.webp | 295 KB | 292.3 KB | 0.7% | |
| OAx.webp | 255.4 KB | 250.2 KB | 0.6% | |
| x4k.webp | 202.4 KB | 202.5 KB | 0.5% | |
| hSe.webp | 203.4 KB | 202 KB | 0.5% | |
| _4O.webp | 171 KB | 171 KB | 0.4% | |
| P7-.gif | 151.3 KB | 144.2 KB | 0.3% | |
| H_o.webp | 125.2 KB | 125.3 KB | 0.3% | |
| 1wd.webp | 123.9 KB | 123.1 KB | 0.3% | |
| sq_.webp | 117.7 KB | 117.7 KB | 0.3% | |
| hv7.gif | 215.8 KB | 114.4 KB | 0.3% | |

708x524 WEBP (32-bit color) 261.5 kB

References

- <https://developer.android.com/develop/ui/views/layout/declaring-layout>
- <https://developer.android.com/studio/profile/apk-profiler>
- <https://developer.android.com/studio>

In the following example, the XML resource defines a frame whose definition is part of the NIM template:

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

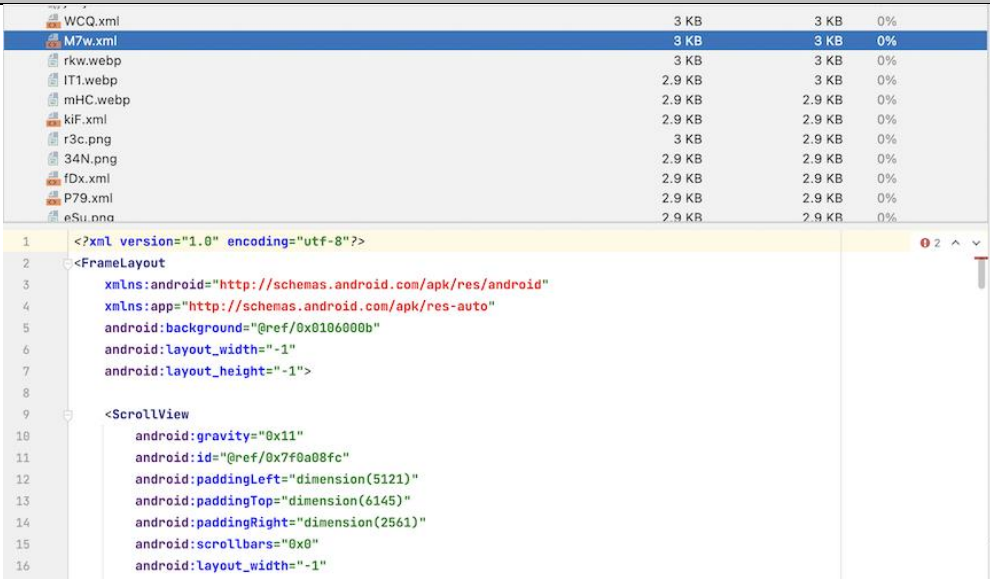
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|------------------------------------|---|
| | <div data-bbox="489 285 1472 860"></div> <p data-bbox="489 909 1940 1027">The contents of that XML file shows how the frame of the NIM Template on the Accused Samsung Device, defines various UI elements including the frame size, color and layouts of the various elements within this frame.</p> <pre data-bbox="489 1068 1230 1430"><?xml version="1.0" encoding="utf-8"?> <FrameLayout xmlns:android="http://schemas.android.com/apk/res/android" xmlns:app="http://schemas.android.com/apk/res-auto" android:background="@ref/0x0106000b" android:layout_width="-1" android:layout_height="-1"> <ScrollView android:gravity="0x11" android:id="@ref/0x7f0a08fc" android:paddingLeft="dimension(5121)" android:paddingTop="dimension(6145)" android:paddingRight="dimension(2561)" android:scrollbars="0x0" android:layout_width="-1" android:layout_height="-1"></pre> |

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| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <pre> android:layout_height="-1"> <androidx.constraintlayout.widget.ConstraintLayout android:orientation="1" android:id="@ref/0x7f0a08f4" android:paddingBottom="dimension(51201) " android:layout_width="-1" android:layout_height="-2"> <TextView android:textSize="dimension(6146) " android:ellipsize="3" android:id="@ref/0x01020016" android:layout_width="-2" android:layout_height="-2" android:layout_marginLeft="dimension(1281) " android:layout_marginRight="dimension(1281) " android:text="@ref/0x7f120856" android:maxLines="2" android:layout_marginHorizontal="dimension(1281) " app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toTopOf="0" style="@ref/0x7f1306a7" /> <TextView android:textSize="dimension(4098) " android:id="@ref/0x7f0a096f" android:layout_height="-2" android:layout_marginTop="dimension(1025) " android:text="@ref/0x7f1208bd" android:layout_marginStart="@ref/0x7f07064f" android:layout_marginEnd="@ref/0x7f07064e" app:layout_constrainedWidth="true" app:layout_constraintEnd_toEndOf="0" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x01020016" style="@ref/0x7f1306a6" /> <TextView android:id="@ref/0x7f0a0a2d" android:visibility="1" android:text="@ref/0x7f120290" app:layout_constraintEnd_toEndOf="@ref/0x7f0a0426" app:layout_constraintStart_toStartOf="@ref/0x7f0a096f" app:layout_constraintTop_toBottomOf="@ref/0x7f0a096f" style="@ref/0x7f13027c" /> <TextView android:id="@ref/0x7f0a042a" android:layout_marginTop="dimension(4097) " </pre> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <pre> android:text="@ref/0x7f1202fd" android:labelFor="@ref/0x7f0a0427" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0a2d" style="@ref/0x7f1306a1" /> <com.google.android.material.card.MaterialCardView android:id="@ref/0x7f0a01c7" app:layout_constraintEnd_toStartOf="@ref/0x7f0a0426" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a042a" style="@ref/0x7f1306a2"> <EditText android:id="@ref/0x7f0a0427" android:maxLength="32" android:inputType="0x61" style="@ref/0x7f13069f" /> </com.google.android.material.card.MaterialCardView> <ImageView android:id="@ref/0x7f0a0426" android:contentDescription="@ref/0x7f1208b2" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a01c7" app:layout_constraintEnd_toEndOf="0" app:layout_constraintTop_toTopOf="@ref/0x7f0a01c7" style="@ref/0x7f1306a3" /> <TextView android:id="@ref/0x7f0a0429" android:visibility="1" android:layout_width="dimension(1)" android:text="@ref/0x7f1208b1" app:layout_constraintEnd_toEndOf="0" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a01c7" style="@ref/0x7f1306a0" /> <TextView android:id="@ref/0x7f0a03b4" android:layout_marginTop="@ref/0x7f070642" android:text="@ref/0x7f1208ad" android:labelFor="@ref/0x7f0a03b1" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0429" style="@ref/0x7f1306a1" /> <com.google.android.material.card.MaterialCardView android:id="@ref/0x7f0a01c4" app:layout_constraintEnd_toStartOf="@ref/0x7f0a03b0" </pre> |

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| US 8,510,407's Claim Limitation | Accused Instrumentality |
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| | <pre> app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a03b4" style="@ref/0x7f1306a2"> <EditText android:id="@ref/0x7f0a03b1" android:inputType="0x21" style="@ref/0x7f13069f" /> </com.google.android.material.card.MaterialCardView> <ImageView android:id="@ref/0x7f0a03b0" android:contentDescription="@ref/0x7f1208af" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a01c4" app:layout_constraintEnd_toEndOf="0" app:layout_constraintTop_toTopOf="@ref/0x7f0a01c4" style="@ref/0x7f1306a3" /> <TextView android:id="@ref/0x7f0a03b3" android:layout_width="dimension(1)" android:text="@ref/0x7f1208ac" app:layout_constraintEnd_toEndOf="0" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a01c4" style="@ref/0x7f1306a0" /> <TextView android:id="@ref/0x7f0a0298" android:layout_marginTop="@ref/0x7f070642" android:text="@ref/0x7f1208a6" android:labelFor="@ref/0x7f0a0296" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a03b3" style="@ref/0x7f1306a1" /> <com.google.android.material.card.MaterialCardView android:id="@ref/0x7f0a01a9" app:layout_constraintEnd_toStartOf="@ref/0x7f0a0295" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0298" style="@ref/0x7f1306a2"> <com.google.android.material.textfield.TextInputEditText android:id="@ref/0x7f0a0296" android:longClickable="false" android:inputType="0x21" android:textIsSelectable="false" style="@ref/0x7f13069f" /> </com.google.android.material.card.MaterialCardView> </pre> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <pre> <ImageView android:id="@ref/0x7f0a0295" android:contentDescription="@ref/0x7f1208a8" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a01a9" app:layout_constraintEnd_toEndOf="0" app:layout_constraintTop_toTopOf="@ref/0x7f0a01a9" style="@ref/0x7f1306a3" /> <TextView android:id="@ref/0x7f0a0297" android:layout_width="dimension(1)" android:text="@ref/0x7f1208ac" app:layout_constraintEnd_toEndOf="0" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a01a9" style="@ref/0x7f1306a0" /> <TextView android:id="@ref/0x7f0a0703" android:layout_marginTop="@ref/0x7f070642" android:text="@ref/0x7f1208b8" android:labelFor="@ref/0x7f0a06fe" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0297" style="@ref/0x7f1306a1" /> <androidx.cardview.widget.CardView android:id="@ref/0x7f0a01cf" app:layout_constraintEnd_toStartOf="@ref/0x7f0a06fd" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0703" style="@ref/0x7f1306a2"> <com.google.android.material.textfield.TextInputLayout android:id="@ref/0x7f0a0701" android:layout_width="-1" android:layout_height="-2" app:hintEnabled="false" app:passwordToggleEnabled="true" app:passwordToggleTint="@ref/0x7f0601d2"> <com.weather.Weather.ui.WeatherEditText android:id="@ref/0x7f0a06ff" android:maxLength="64" app:passwordToggleEnabled="true" app:passwordToggleTint="@ref/0x7f0601d2" style="@ref/0x7f1303ff" /> </com.google.android.material.textfield.TextInputLayout> </androidx.cardview.widget.CardView> </pre> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <pre> <ImageView android:id="@ref/0x7f0a06fd" android:contentDescription="@ref/0x7f1208bb" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a01cf" app:layout_constraintEnd_toEndOf="0" app:layout_constraintTop_toTopOf="@ref/0x7f0a01cf" style="@ref/0x7f1306a3" /> <TextView android:textStyle="0x0" android:textColor="@ref/0x7f06048a" android:id="@ref/0x7f0a0704" android:visibility="0" android:layout_width="dimension(1)" android:text="@ref/0x7f120605" android:contentDescription="@ref/0x7f120606" app:layout_constraintBottom_toTopOf="@ref/0x7f0a0159" app:layout_constraintEnd_toEndOf="@ref/0x7f0a06fd" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a01cf" style="@ref/0x7f1306a0" /> <TextView android:id="@ref/0x7f0a0700" android:visibility="2" android:layout_width="dimension(1)" android:text="@ref/0x7f120605" android:contentDescription="@ref/0x7f120606" app:layout_constraintBottom_toTopOf="@ref/0x7f0a0159" app:layout_constraintEnd_toEndOf="@ref/0x7f0a06fd" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a01cf" style="@ref/0x7f1306a0" /> <androidx.constraintlayout.widget.Barrier android:id="@ref/0x7f0a0159" android:layout_width="-2" android:layout_height="-2" app:barrierDirection="3" app:constraint_referenced_ids="password_suggestion_textView,password_error_textView" /> <TextView android:id="@ref/0x7f0a02a0" android:layout_marginTop="@ref/0x7f070642" android:text="@ref/0x7f1208a9" android:labelFor="@ref/0x7f0a029b" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0159" style="@ref/0x7f1306a1" /> </pre> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <pre> <androidx.cardview.widget.CardView android:id="@ref/0x7f0a01aa" app:layout_constraintEnd_toStartOf="@ref/0x7f0a0299" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a02a0" style="@ref/0x7f1306a2"> <com.google.android.material.textfield.TextInputLayout android:id="@ref/0x7f0a029e" android:layout_width="-1" android:layout_height="-2" app:hintEnabled="false" app:passwordToggleContentDescription="@ref/0x7f120602" app:passwordToggleTint="@ref/0x7f0601d2"> <com.google.android.material.textfield.TextInputEditText android:id="@ref/0x7f0a029b" android:longClickable="false" android:maxLength="64" android:textIsSelectable="false" app:passwordToggleContentDescription="@ref/0x7f120602" app:passwordToggleTint="@ref/0x7f0601d2" style="@ref/0x7f1303ff" /> </com.google.android.material.textfield.TextInputLayout> </androidx.cardview.widget.CardView> <ImageView android:id="@ref/0x7f0a0299" android:contentDescription="@ref/0x7f1208ab" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a01aa" app:layout_constraintEnd_toEndOf="0" app:layout_constraintTop_toTopOf="@ref/0x7f0a01aa" style="@ref/0x7f1306a3" /> <TextView android:id="@ref/0x7f0a029d" android:layout_width="dimension(1)" android:text="@ref/0x7f1208b5" app:layout_constrainedWidth="true" app:layout_constraintEnd_toEndOf="0" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a01aa" style="@ref/0x7f1306a0" /> <TextView android:id="@ref/0x7f0a0457" android:layout_width="-2" android:layout_marginTop="@ref/0x7f070642" android:text="@ref/0x7f120332" </pre> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <pre> android:labelFor="@ref/0x7f0a0454" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a029d" style="@ref/0x7f1306a1" /> <ImageView android:id="@ref/0x7f0a045b" android:layout_width="dimension(4097)" android:layout_height="dimension(4097)" android:layout_marginTop="dimension(1025)" android:src="@ref/0x7f080274" android:contentDescription="@ref/0x7f1203a6" android:layout_marginStart="dimension(2561)" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a0457" app:layout_constraintStart_toEndOf="@ref/0x7f0a0457" /> <com.google.android.material.card.MaterialCardView android:id="@ref/0x7f0a01c8" app:layout_constraintEnd_toStartOf="@ref/0x7f0a0453" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0457" style="@ref/0x7f1306a2"> <com.google.android.material.textfield.TextInputLayout android:id="@ref/0x7f0a0455" app:boxBackgroundColor="@ref/0x0106000d" app:boxStrokeWidth="dimension(1)" app:endIconDrawable="@ref/0x7f080228" app:endIconTint="@ref/0x7f0601d2" style="@ref/0x7f130402"> <com.weather.Weather.ui.KeyValueDropDownView android:textColor="@ref/0x7f0604ff" android:id="@ref/0x7f0a0454" android:background="@ref/0x00000000" android:inputType="0x1" style="@ref/0x7f130400" /> </com.google.android.material.textfield.TextInputLayout> </com.google.android.material.card.MaterialCardView> <ImageView android:id="@ref/0x7f0a0453" android:contentDescription="@ref/0x7f1208b3" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a01c8" app:layout_constraintEnd_toEndOf="0" app:layout_constraintTop_toTopOf="@ref/0x7f0a01c8" style="@ref/0x7f1306a3" /> <CheckBox android:gravity="0x30" </pre> |

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| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <pre> android:id="@ref/0x7f0a08f3" android:paddingTop="dimension(769) " android:layout_width="-2" android:layout_height="-2" android:layout_marginTop="@ref/0x7f070642" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a01c8" style="@ref/0x7f1306a6" /> <TextView android:id="@ref/0x7f0a01e7" android:layout_width="dimension(1) " android:layout_height="-2" android:layout_marginStart="dimension(1793) " android:layout_marginEnd="@ref/0x7f07064e" android:labelFor="@ref/0x7f0a08f3" app:layout_constrainedWidth="true" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a08f3" app:layout_constraintEnd_toEndOf="0" app:layout_constraintStart_toEndOf="@ref/0x7f0a08f3" app:layout_constraintTop_toTopOf="@ref/0x7f0a08f3" /> <TextView android:id="@ref/0x7f0a0a35" android:layout_marginTop="dimension(1537) " android:text="@ref/0x7f1208c3" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a01e7" style="@ref/0x7f1306a0" /> <Button android:textColor="@ref/0x7f060501" android:id="@ref/0x7f0a0192" android:background="@ref/0x7f080071" android:layout_marginTop="dimension(7681) " android:text="@ref/0x7f120850" android:key="sign_up_button" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0a35" style="@ref/0x7f130004" /> <TextView android:id="@ref/0x7f0a0122" android:layout_width="-2" android:layout_marginTop="@ref/0x7f070642" android:text="@ref/0x7f1206c9" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0192" style="@ref/0x7f1306a6" /> </pre> |

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| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <pre> <TextView android:textColor="@ref/0x7f06000a" android:id="@ref/0x7f0a05a6" android:text="@ref/0x7f12083b" android:layout_marginStart="dimension(2049)" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a0122" app:layout_constraintStart_toEndOf="@ref/0x7f0a0122" style="@ref/0x7f1306a6" /> <TextView android:textColor="@ref/0x7f0601c2" android:id="@ref/0x7f0a017b" android:visibility="2" android:layout_width="-1" android:layout_marginTop="@ref/0x7f070642" android:layout_marginStart="@ref/0x7f07064f" android:layout_marginEnd="@ref/0x7f07064e" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a0122" style="@ref/0x7f1306a6" /> <TextView android:textColor="@ref/0x7f06000a" android:id="@ref/0x7f0a09bd" android:layout_marginTop="@ref/0x7f070642" android:text="@ref/0x7f1208c4" android:paddingEnd="dimension(2561)" app:layout_constraintStart_toStartOf="0" app:layout_constraintTop_toBottomOf="@ref/0x7f0a017b" style="@ref/0x7f1306a6" /> <TextView android:id="@ref/0x7f0a038e" android:text=" " android:importantForAccessibility="2" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a09bd" app:layout_constraintStart_toEndOf="@ref/0x7f0a09bd" app:layout_constraintTop_toTopOf="@ref/0x7f0a09bd" style="@ref/0x7f1306a6" /> <TextView android:textColor="@ref/0x7f06000a" android:id="@ref/0x7f0a0787" android:text="@ref/0x7f1208be" android:paddingStart="dimension(2561)" app:layout_constraintBottom_toBottomOf="@ref/0x7f0a09bd" app:layout_constraintStart_toEndOf="@ref/0x7f0a038e" style="@ref/0x7f1306a6" /> </androidx.constraintlayout.widget.ConstraintLayout> </ScrollView> </pre> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|--|---|
| | <pre data-bbox="489 313 1136 513"><ProgressBar android:layout_gravity="0x11" android:id="@ref/0x7f0a0792" android:visibility="1" android:layout_width="@ref/0x7f070691" android:layout_height="@ref/0x7f070691" android:contentDescription="@ref/0x7f1208f8" android:indeterminateTint="@ref/0x7f06045f" /> </FrameLayout></pre> <p data-bbox="489 557 1976 716">Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that the networked information monitor template includes a markup language file. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |
| 9. The client computing device of claim 1, wherein one or more computer program modules are configured such that the time-varying content is received from the web server over the network according to the TCP/IP protocol. | <p data-bbox="489 729 1961 894">The Accused Instrumentalities are client computing devices which meet the limitations of claim 1 for the reasons stated above. The Accused Instrumentalities have one or more computer program modules that are configured such that the time-varying content is received from the web server over the network according to the TCP/IP protocol.</p> <p data-bbox="489 943 1976 1065">The Accused Instrumentalities include one or more computer program modules are configured to receive time varying content. For example, upon installation of the “Weather Channel for Samsung” app, a splash screen can be seen with the message ‘Still waiting for server...’ as it loads data to display.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407


| US 8,510,407’s Claim Limitation | Accused Instrumentality |
|---------------------------------|--|
| | <div data-bbox="489 289 873 1136"></div> <p data-bbox="489 1182 1963 1344">Upon loading this data, the screen shows the time-varying content for the weather based on the current date and for the location of the phone, as shown below. Note ‘San Bruno’ in the header on the image below left. Tapping on the header displays the current location with an option to set the location to another city or zip code, below right.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

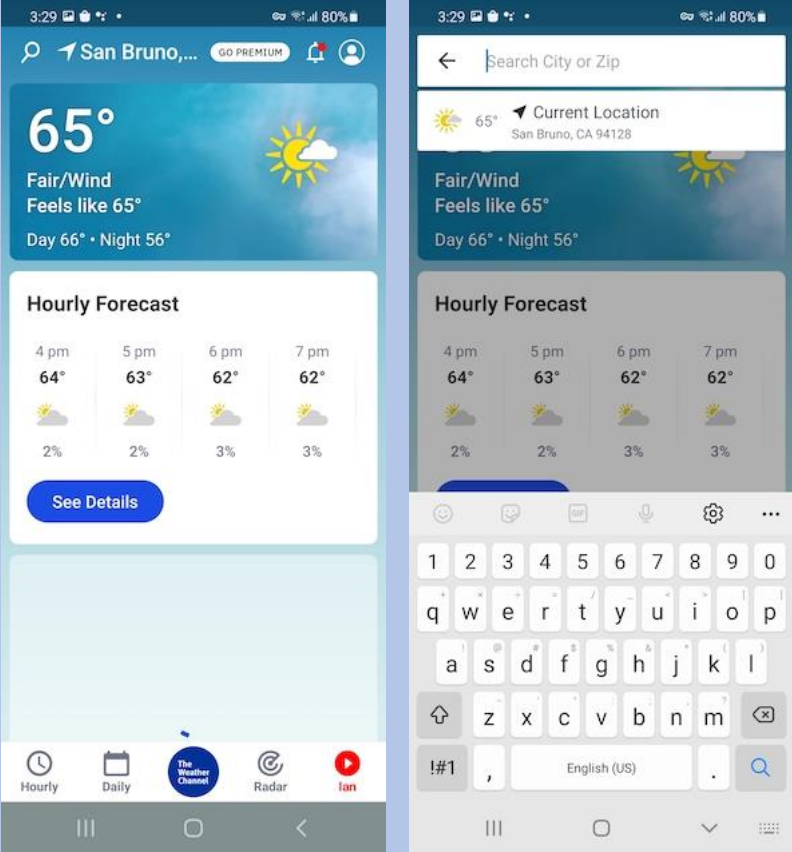
| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <div data-bbox="499 289 1285 1136"></div> <p data-bbox="489 1190 1955 1312">Additionally, the Accused Instrumentalities so that the time varying content is received from the web server over the network according to the TCP/IP protocol. As discussed above, a test app was generate that pointed to the following location: fennetic.net/irc/finney.org/~hal/home.html</p> <p data-bbox="489 1360 1600 1399">Running the App on the Samsung device displays the content as shown below.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407


| US 8,510,407’s Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <div data-bbox="489 289 909 1214"></div> <p data-bbox="489 1260 1948 1382">Monitoring the network traffic during the load of this content reveals that a network request was initiated over TCP/IP and content was received as shown in the image below of the ‘Network Inspector’ analysis tool which is part of the Android Studio development suite.</p> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

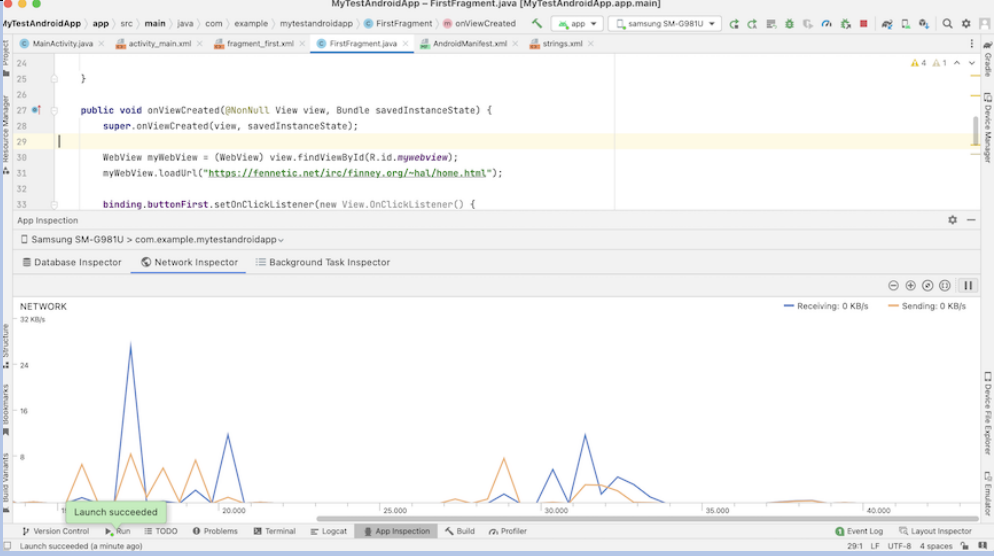
| US 8,510,407's Claim Limitation | Accused Instrumentality |
|--|--|
| |  <p>Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that there are one or more computer program modules are configured such that the time-varying content is received from the web server over the network according to the TCP/IP protocol. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |
| 10. The client computing device of claim 1, wherein the network location corresponds to a uniform resource | <p>The Accused Instrumentalities are client computing devices which meet the limitations of claim 1 for the reasons stated above. Within the Accused Instrumentalities, the NIM Templates have a network location that corresponds to a uniform resource locator (URL). For this example, with the Samsung Test App, created using Android Studio, Android's development environment, there is a simple webview using the following URL:</p> <p>fennetic.net/irc/finney.org/~hal/home.html</p> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|---|--|
| locator included in the networked information monitor template. | <p>This can be seen in this line of code:</p> <pre>myWebView.loadUrl("https://fennetic.net/irc/finney.org/~hal/home.html");</pre> <p>This code come from the main portion of the Samsung Test App shown below as the source code and then as shown in the Android Studio development tool.</p> <pre>package com.example.mytestandroidapp; import ... public class FirstFragment extends Fragment { private FragmentFirstBinding binding; @Override public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) { binding = FragmentFirstBinding.inflate(inflater, container, false); return binding.getRoot(); } public void onViewCreated(@NonNull View, Bundle savedInstanceState) { super.onViewCreated(view, savedInstanceState); WebView myWebView = (WebView) view.findViewById(R.id.mywebview); myWebView.loadUrl("https://fennetic.net/irc/finney.org/~hal/home.html"); binding.buttonFirst.setOnClickListener(new View.OnClickListener() { @Override public void onClick(View view) { myWebView.loadUrl("https://fennetic.net/irc/finney.org/~hal/web_of_trust.html"); } }); } @Override public void onDestroyView() {</pre> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <pre> super.onDestroyView(); binding = null; } } </pre>  <p>Running the app on a Samsung S20 with Android 11 as shown below, displays the web page for Hal Finney who was a notable computer scientist.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407


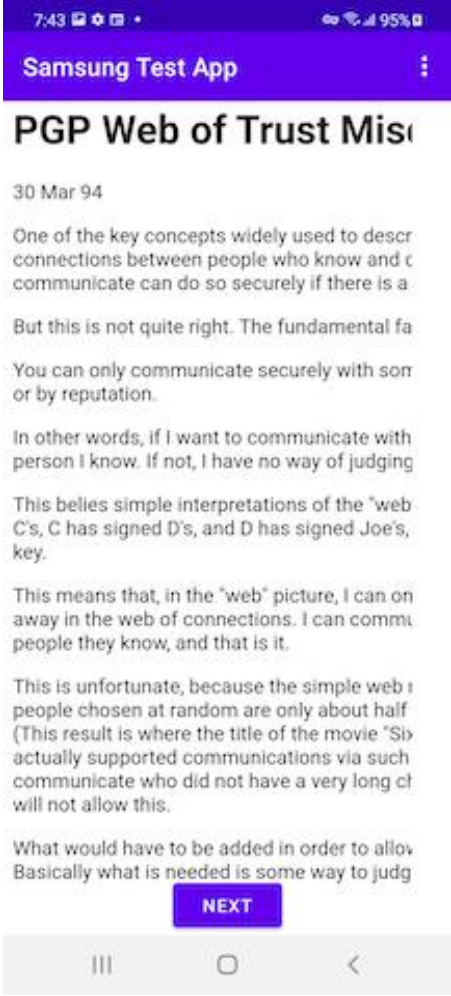
| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <div data-bbox="489 289 909 1218"></div> <p data-bbox="489 1263 1892 1344">Clicking on the 'NEXT' button displays a second page from the Hal Finney website based on a URL embedded in the code goes to another page.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

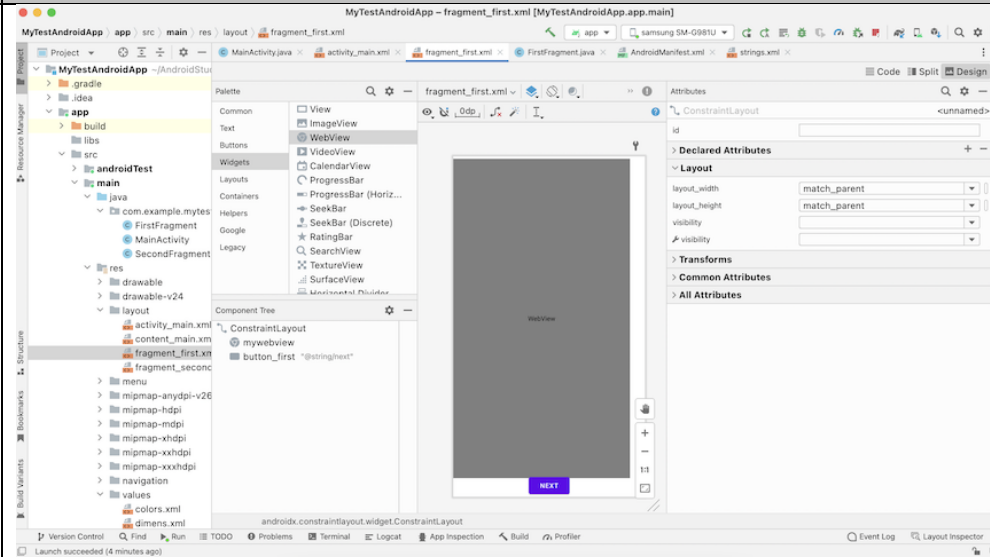
| US 8,510,407’s Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| |  <p>7:43 95%</p> <p>Samsung Test App</p> <h3>PGP Web of Trust Misconception</h3> <p>30 Mar 94</p> <p>One of the key concepts widely used to describe connections between people who know and communicate can do so securely if there is a key.</p> <p>But this is not quite right. The fundamental failure is that you can only communicate securely with someone you know or by reputation.</p> <p>In other words, if I want to communicate with a person I know. If not, I have no way of judging if they are trustworthy.</p> <p>This belies simple interpretations of the "web of trust". C's, C has signed D's, and D has signed Joe's, and Joe has a key.</p> <p>This means that, in the "web" picture, I can only communicate with people I know, or people I know people they know, and that is it.</p> <p>This is unfortunate, because the simple web of trust model means that only about half of the people chosen at random are only about half trustworthy. (This result is where the title of the movie "Six Degrees of Separation" comes from.)</p> <p>What would have to be added in order to allow secure communication via such a system? Basically what is needed is some way to judge the trustworthiness of people who are not known to you.</p> <p>NEXT</p> |

Here is the Layout as seen in the Android Studio development environment:

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

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And here is the XML created by Android Studio, which contains the layout of the screen as shown below:

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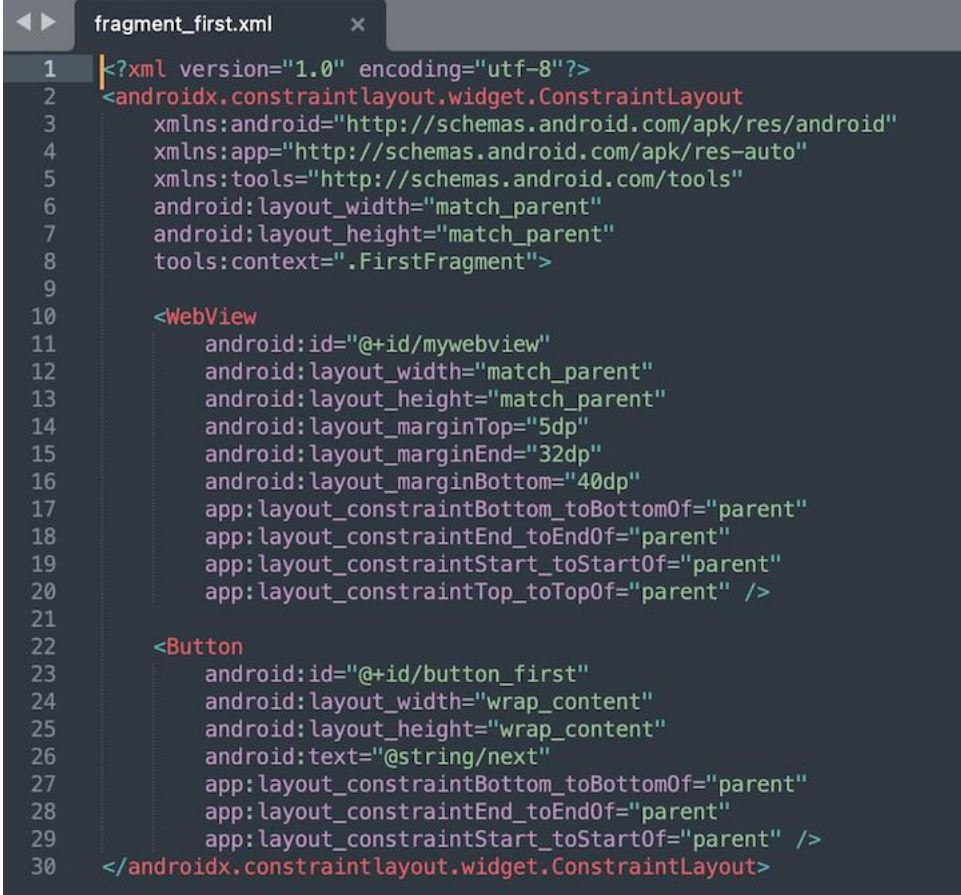
| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <div data-bbox="489 293 1444 1182">  <pre> 1 <?xml version="1.0" encoding="utf-8"?> 2 <androidx.constraintlayout.widget.ConstraintLayout 3 xmlns:android="http://schemas.android.com/apk/res/android" 4 xmlns:app="http://schemas.android.com/apk/res-auto" 5 xmlns:tools="http://schemas.android.com/tools" 6 android:layout_width="match_parent" 7 android:layout_height="match_parent" 8 tools:context=".FirstFragment"> 9 10 <WebView 11 android:id="@+id/mywebview" 12 android:layout_width="match_parent" 13 android:layout_height="match_parent" 14 android:layout_marginTop="5dp" 15 android:layout_marginEnd="32dp" 16 android:layout_marginBottom="40dp" 17 app:layout_constraintBottom_toBottomOf="parent" 18 app:layout_constraintEnd_toEndOf="parent" 19 app:layout_constraintStart_toStartOf="parent" 20 app:layout_constraintTop_toTopOf="parent" /> 21 22 <Button 23 android:id="@+id/button_first" 24 android:layout_width="wrap_content" 25 android:layout_height="wrap_content" 26 android:text="@string/next" 27 app:layout_constraintBottom_toBottomOf="parent" 28 app:layout_constraintEnd_toEndOf="parent" 29 app:layout_constraintStart_toStartOf="parent" /> 30 </androidx.constraintlayout.widget.ConstraintLayout> </pre> </div> <p data-bbox="489 1224 1854 1256">The XML also includes strings, which in this example shows the URL for the Hal Finney website.</p> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

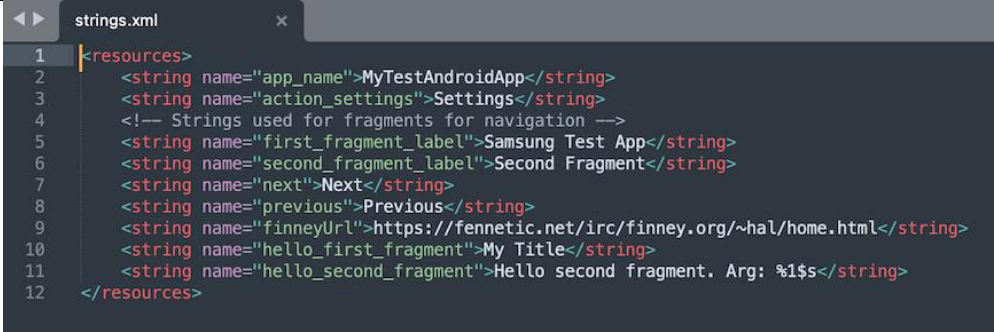
| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| |  <p>And here is the app when run. Notice the same Hal Finney web page loads based on the URL in the XML file.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407


| US 8,510,407’s Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <div data-bbox="489 289 898 1192"></div> <p data-bbox="489 1230 1751 1266">The test app (‘MyTestAndroidApp’), when installed as shown on the home screen is shown below.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

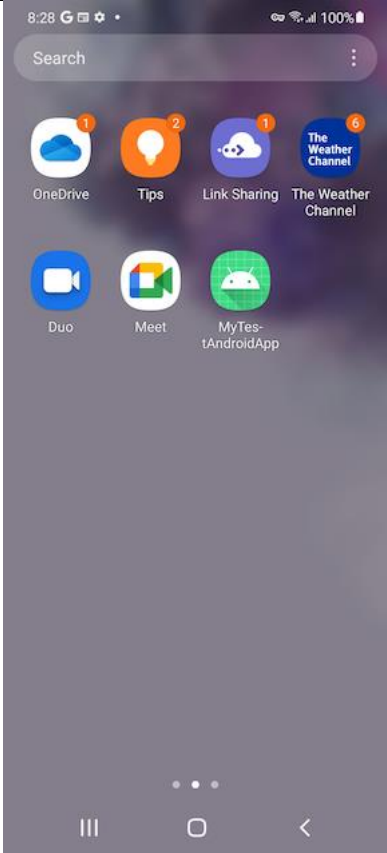
| US 8,510,407’s Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <div data-bbox="489 289 873 1136"></div> <p data-bbox="489 1177 1982 1284">When the APK is used, an installer creates an APP using the XML layout and other resource files that are converted to binary format come from within the app’s bundle, the APK file, which is a zipped archive. A release APK file can be opened within Android Studio to reveal these XML files, as shown in the following images.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

US 8,510,407’s
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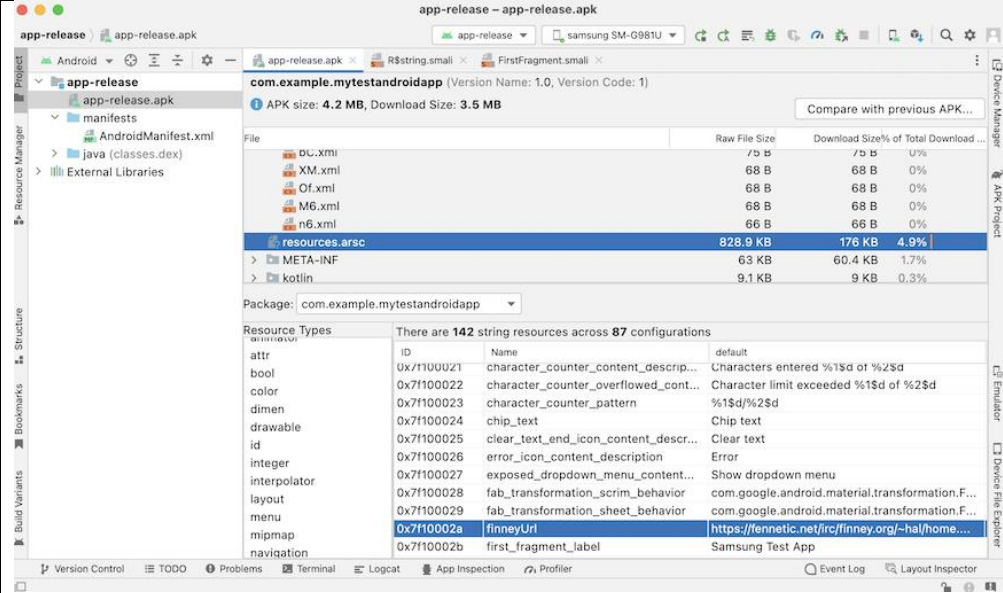


Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

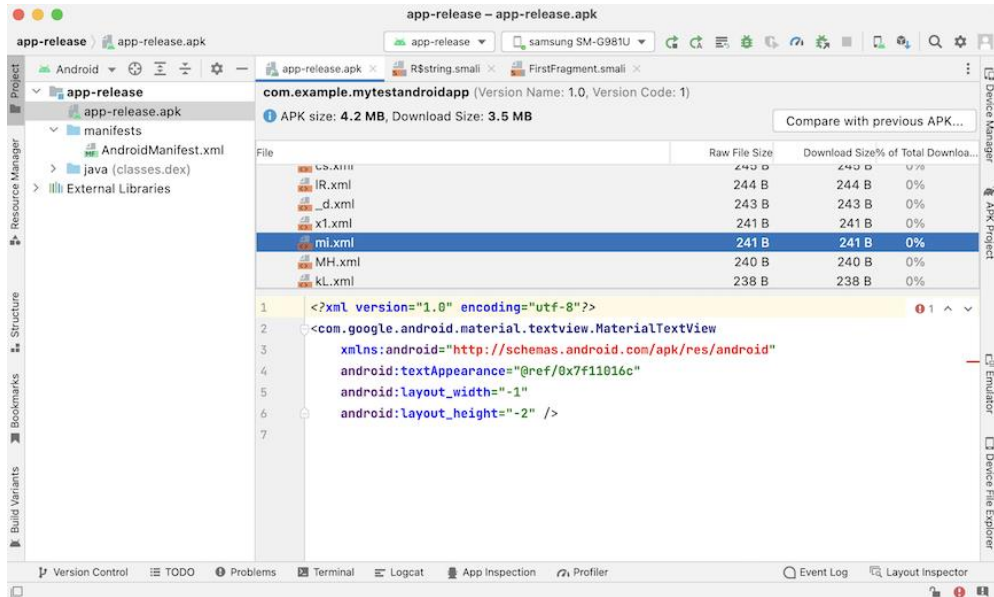
| US 8,510,407's Claim Limitation | Accused Instrumentality | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|---------------|---------------------|---------------|---------------------|--------|-------|-------|----|--------|-------|-------|----|--------|-------|-------|----|--------|-------|-------|----|--------|-------|-------|----|--------|-------|-------|----|--------|-------|-------|----|
| | <div><table data-bbox="732 453 1425 599"><thead><tr><th>File</th><th>Raw File Size</th><th>Download Size</th><th>% of Total Download</th></tr></thead><tbody><tr><td>US.xml</td><td>243 B</td><td>243 B</td><td>0%</td></tr><tr><td>IR.xml</td><td>244 B</td><td>244 B</td><td>0%</td></tr><tr><td>_d.xml</td><td>243 B</td><td>243 B</td><td>0%</td></tr><tr><td>x1.xml</td><td>241 B</td><td>241 B</td><td>0%</td></tr><tr><td>ml.xml</td><td>241 B</td><td>241 B</td><td>0%</td></tr><tr><td>MH.xml</td><td>240 B</td><td>240 B</td><td>0%</td></tr><tr><td>kl.xml</td><td>238 B</td><td>238 B</td><td>0%</td></tr></tbody></table><pre data-bbox="732 607 1425 737"><?xml version="1.0" encoding="utf-8"?> <com.google.android.material.textview.MaterialTextView xmlns:android="http://schemas.android.com/apk/res/android" android:textAppearance="@ref/0x7f11016c" android:layout_width="-1" android:layout_height="-2" /></pre></div> <p>References:</p> <ul style="list-style-type: none">• https://developer.android.com/guide/topics/resources/providing-resources• https://developer.android.com/guide/topics/resources/layout-resource <p>In Summary, the Samsung Test App shows that there is a network location that corresponds to a uniform resource locator included in the networked information monitor template. Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that there is network location that corresponds to a uniform resource locator included in the networked information monitor template. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> | File | Raw File Size | Download Size | % of Total Download | US.xml | 243 B | 243 B | 0% | IR.xml | 244 B | 244 B | 0% | _d.xml | 243 B | 243 B | 0% | x1.xml | 241 B | 241 B | 0% | ml.xml | 241 B | 241 B | 0% | MH.xml | 240 B | 240 B | 0% | kl.xml | 238 B | 238 B | 0% |
| File | Raw File Size | Download Size | % of Total Download | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| US.xml | 243 B | 243 B | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IR.xml | 244 B | 244 B | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _d.xml | 243 B | 243 B | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| x1.xml | 241 B | 241 B | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ml.xml | 241 B | 241 B | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MH.xml | 240 B | 240 B | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| kl.xml | 238 B | 238 B | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|--|---|
| <p>11. The client computing device of claim 10, wherein the one or more computer program modules are further configured such that accessing the networked information monitor defined by the networked information monitor template results in transmission of the content request to the uniform resource locator included in the networked information monitor template, and the content</p> | <p>The Accused Instrumentalities are client computing devices which meet the limitations of claim 10 for the reasons stated above. The Accused Instrumentalities have one or more computer program modules that are further configured such that accessing the networked information monitor defined by the networked information monitor template results in transmission of the content request to the uniform resource locator included in the networked information monitor template, and the content request being transmitted according to the TCP/IP protocol over the network.</p> <p>As discussed above, running the test app displays the content as shown below.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407


| US 8,510,407's Claim Limitation | Accused Instrumentality |
|---|--|
| <p>request being transmitted according to the TCP/IP protocol over the network.</p> | <div data-bbox="489 289 854 1092"></div> <p>Monitoring the network traffic during the load of this content reveals that a network request was initiated over TCP/IP and content was received as shown in the image below of the ‘Network Inspector’ analysis tool which is part of the Android Studio development suite. The transmission and receipt of the information demonstrates that there are one or more computer modules configured such that accessing the networked information monitor defined by the networked information monitor template results in transmission of the content request to the uniform resource locator included in the networked</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

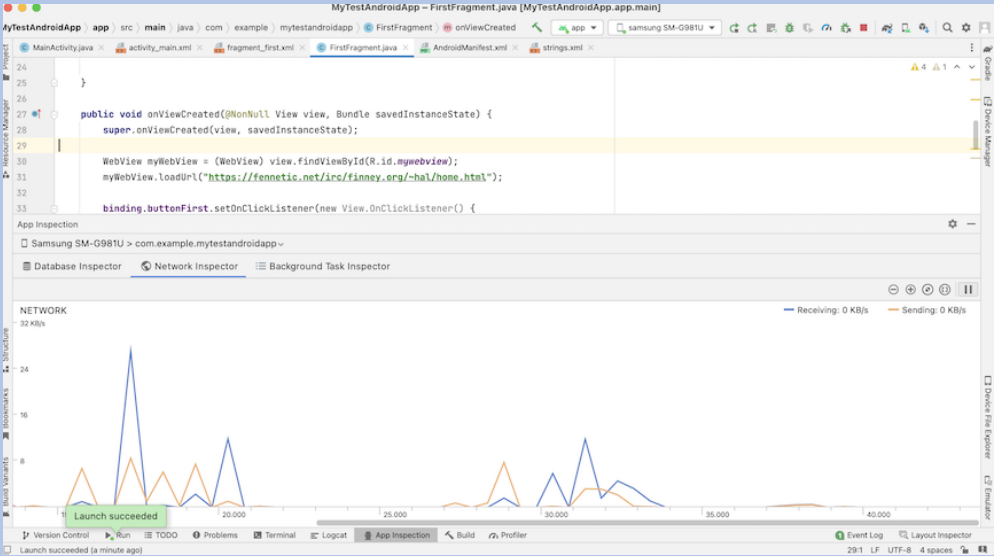
| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | <p>information monitor template, and the content request being transmitted according to the TCP/IP protocol over the network.</p>  |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407


| US 8,510,407's Claim Limitation | Accused Instrumentality |
|--|---|
| <p>12. The client computing device of claim 1, wherein the one or more computer program modules are further configured: to transmit, over the network to a networked information monitor server, a request for the networked information monitor template;</p> | <p>The Accused Instrumentalities are client computing devices which meet the limitations of claim 1 for the reasons stated above. The Accused Instrumentalities have one or more computer program modules that are further configured to transmit over the network to a networked information monitor server, a request for the networked information monitor template. For example, by running the Galaxy Store app by tapping the Galaxy Store Icon:</p>  <p>This loads the Galaxy Store App as shown below. The Galaxy Store app comes preinstalled on Samsung Phones as shown below.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

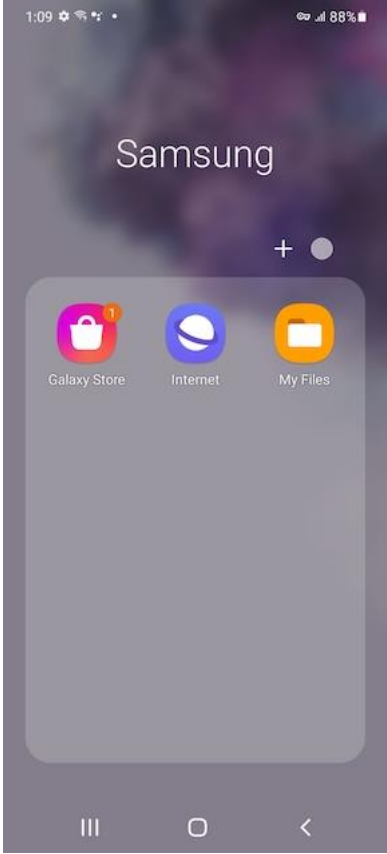
| US 8,510,407’s Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <div data-bbox="489 289 873 1138">A screenshot of a Samsung smartphone's home screen. The status bar at the top shows the time as 1:09, signal strength, Wi-Fi, and 88% battery. The background is a dark purple Samsung logo. Below the logo is a dock with three app icons: Galaxy Store (a red shopping bag with a white '1' badge), Internet (a blue globe), and My Files (an orange folder). The bottom of the screen shows the standard Android navigation bar with three icons: a square, a circle, and a triangle.</div> <p data-bbox="489 1187 1955 1395">From within the Galaxy Store app we search for the term ‘weather’ which displays icons representing various weather NIMs. Scrolling down and the ‘Weather Channel for Samsung’ app is presented as an option, image below left, which can be clicked on for more details, below right. This provides an ‘Install’ button as seen below right. The ability to download and install the Weather Channel app demonstrates that the Accused Instrumentalities includes one or more computer program modules are further</p> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

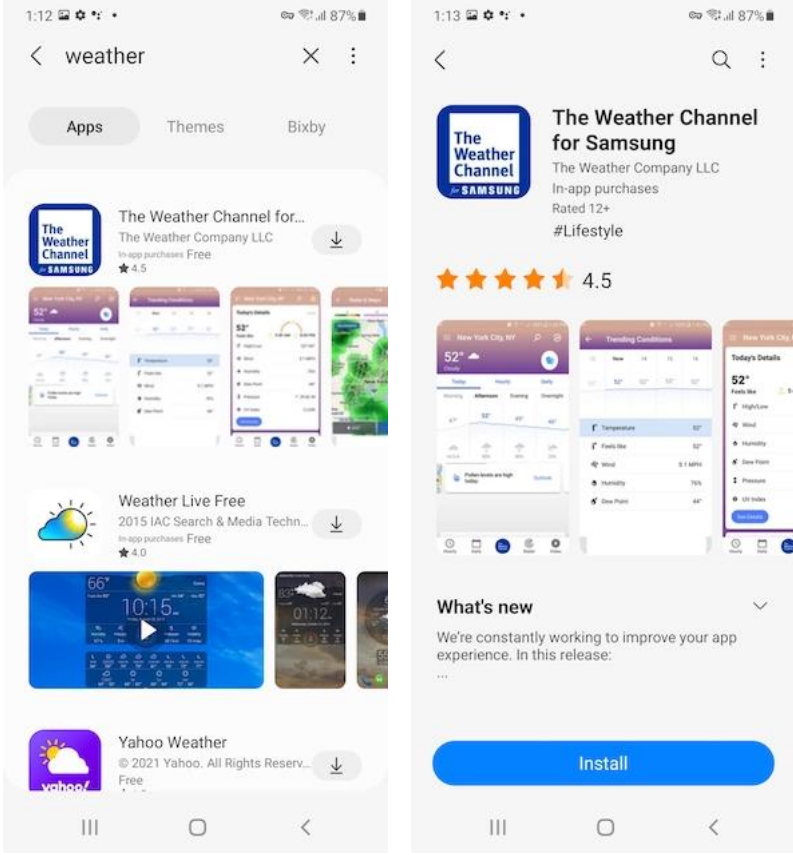
| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <p>configured to transmit, over the network to a networked information monitor server, a request for the networked information monitor template. Notably, downloading and installing includes the downloading of the .APK file from the network serves and creation of the App by the installer.</p>  <p>Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that there are one or more computer program modules are</p> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|--|--|
| | <p>further configured to transmit, over the network to a networked information monitor server, a request for the networked information monitor template. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner.</p> |
| <p>to receive, from the networked information monitor server over the network, the networked information</p> | <p>The Accused Instrumentalities include one or more computer modules configured to receive, from the networked information monitor server over the network, the networked information monitor template.</p> <p>The ability to open the Weather Channel app after installation demonstrates that the Accused Instrumentalities includes one or more computer program modules are further configured to receive, from the networked information monitor server over the network, the networked information monitor template.</p> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|---|--|
| monitor template; and | Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that there are one or more computer program modules are further configured to receive, from the networked information monitor server over the network, the networked information monitor template. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner. |
| to store the networked information monitor template to the electronic storage. | <p>The Accused Instrumentalities store the networked information monitor template to the electronic storage. After installation of the Weather Channel App for Samsung NIM template, one can view the electronic storage.</p> <p>Specifically by looking into the settings of the Accused Instrumentalities and tapping on Battery and Device Care; then tapping on 'Storage' the electronic storage summary is displayed as shown in the image below left. Tapping on the 'Apps' button displays the storage used for each NIM template. Notice that the Weather Channel for Samsung app uses 192MB of storage after downloaded as shown below right.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

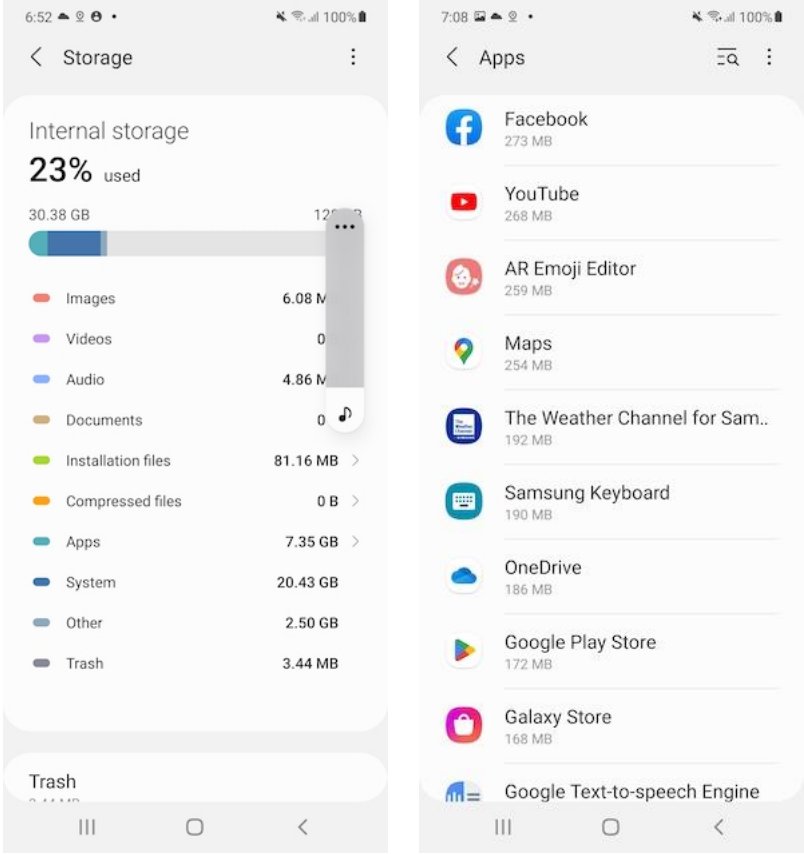
| US 8,510,407’s Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <div data-bbox="489 289 1287 1138"></div> <p data-bbox="489 1230 1953 1395">Tapping on the Weather Channel for Samsung app icon from the list in the image above displays additional detail as shown in the two images below (to shown the full scrollable elements of the screen). Note the additional information about storage, including the amount of data downloaded, and the notation “app downloaded from Galaxy Store”.</p> |

Exhibit A: Best Buy’s Infringement of United States Patent No. 8,510,407

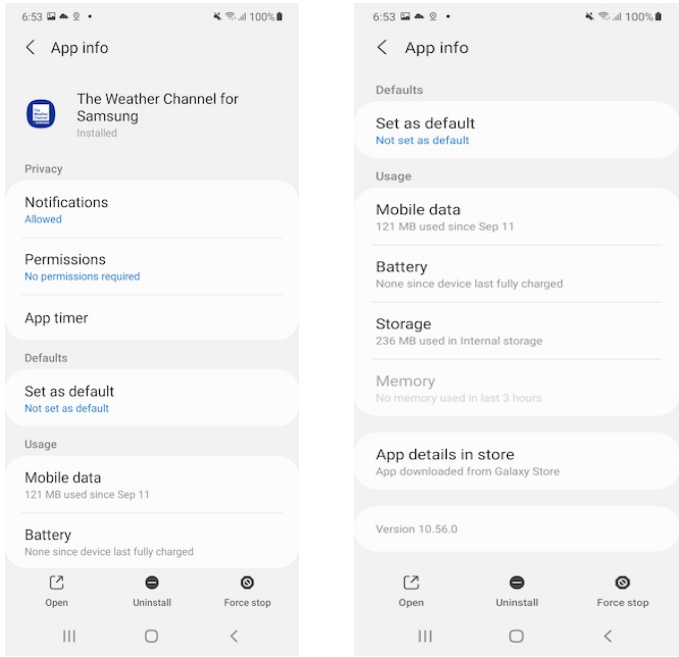
| US 8,510,407’s Claim Limitation | Accused Instrumentality |
|------------------------------------|---|
| | <div data-bbox="487 371 1161 1023"></div> <p data-bbox="487 1070 1969 1279">On information and belief, that Weather Channel for Samsung as well as the relevant data structures (<i>i.e.</i>, the NIM Template) of the APK are necessarily stored on the electronic storage of the Accused Instrumentalities during the process of installing the app. Thus, the Accused Instrumentalities includes one or more computer modules configured to store the networked information monitor template to the electronic storage.</p> <p data-bbox="487 1328 1944 1411">Furthermore, on information and belief, code, which is not publicly available, on the Accused Instrumentalities and apps will demonstrate that there are one or more computer program modules are</p> |

Exhibit A: Best Buy's Infringement of United States Patent No. 8,510,407

| US 8,510,407's Claim Limitation | Accused Instrumentality |
|------------------------------------|--|
| | further configured to store the networked information monitor template to the electronic storage. Additionally, on information and belief, all variations of the Accused Instrumentalities operate in the same infringing manner. |